WATERSHEDS BC
Data Dictionary

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BRITISH COLUMBIA

**Ministry of Environment
Lands and Parks**

Geographic Data BC

NOTE TO USERS

This Users Guide, Version 2, documents results of *Watersheds BC: Watershed Ranking and Assessment Product,* which will be complete in the Summer 1999. This Users Guide is also a revision of the previous Users Guide (Version 1, May 1998) formally referred to as the *Watershed Ranking Tool (WRT).* This project will be ongoing; subsequent versions will be produced as more up-to-date data becomes available.

Any questions or comments should be directed to the following:

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INTRODUCTION

The purpose of *Watersheds BC: Watershed Ranking and Assessment Product* is "to provide decision makers with easy-to-use information about the land, water and resources of the Province." Information from province-wide GIS databases has been summarized on a watershed basis with the results presented in a spreadsheet format. Approximately 420 measurements are calculated for each watershed with many pertaining to the impacts of forest harvesting. Detailed definitions for these 420 measurements form the bulk of this document.

This product is unique in that it will hold an extensive baseline of information for all watersheds in BC. Watersheds can then be ranked, compared and analysed on a wide range of parameters at both local and regional scales. This quantitative information provides resource managers with a baseline of information for assessment and future monitoring purposes.

A major advantage of *Watersheds BC: Watershed Ranking and Assessment Product* is the consistency of the calculations for all the watersheds on a province-wide scale. All calculations are performed to the same degree of confidence in both an analytical and methodological perspective.

SOURCE DATA

Watershed Atlas

The watersheds used in *Watersheds BC: Watershed Ranking and Assessment Product* are from the Watershed Atlas created by BC Fisheries. The Watershed Atlas is available to all from the Ministry of Environment, Lands and Parks' ftp site (ftp.env.gov.bc.ca). The watershed boundaries are derived from paper Federal NTS 1:50,000 base mapping. Watersheds that are third order or higher (based on Strahler's method) have been delineated and assigned a code, including some lower order watersheds where low order streams drain directly into a major river, lake or ocean. The watershed code allows upstream / downstream analysis and amalgamation. The average size of this watershed is about 3000 hectares with a total of about 30,000 for BC. All watersheds smaller than 50 hectares have been excluded from processing in the *Watersheds BC: Watershed Ranking and Assessment Product*.

The Watershed Atlas has recently gone through a small revision since *Watersheds BC: Watershed Ranking and Assessment Product* results were produced (due to small errors detected by users in the first year of wide distribution). Therefore the delivery of the *Watersheds BC: Watershed Ranking and Assessment Product* results include an older version of the watershed units (the "LWSD" layer) that was used when the results were created. This ensures that there will be no mismatch between the watershed code in *Watersheds BC: Watershed Ranking and Assessment Product* spreadsheet and the watershed code of the corresponding watershed from the Watershed Atlas.

Blueline Streams

The "blueline streams" are extracted from the Watershed Atlas which is based on the paper Federal NTS 1:50,000 mapping and are the streams that the watershed boundaries are based on. Because of the scale difference there are usually fewer blueline streams compared to TRIM streams.

There are two length of streams depicted from the blueline stream. One is the blueline surface water stream length which uses the codes 1000, 1050, 1100, 1150, 1250, 1350, 2000 and 2300. This length represents primary and secondary flows in streams and double-line rivers. Construction lines through waterbodies and as sub-surface flow are not included. This length is also used to calculate attributes relating the mainstem and headwater streams of a watershed. The other length that is used is the route length which is the network the Fish Information Summary System and the Macro-reaches is built from. This length uses the

codes 1000, 1050, 1100, 1150, 1200, 1250, 1300, 1350, 1400, 1410, 1425, 2000 and 2300. This length represents all the same lengths as described above but also includes the flow length through a waterbody and construction lines. This length is used to calculate attributes related to the Fish Information Summary System and the Macro-reaches.

Fish Information Summary System

The Fish Information Summary System (FISS) was obtained from the Ministry of Fisheries ftp site. The zones were digitized off of paper Federal NTS 1:50,000 mapping and are linked to the 1:50,000 blueline streams that the watershed boundaries are based on (Watershed Atlas). The fish distribution zones reflect known zones of salmon, sport fish and other fish species. Within the salmon category, included are Chinook, Chum, Coho, Pink, Kokanee and Sockeye. These are all anadramous with the exception of Kokanee salmon which can be resident or fluvial. All activity codes are included in the fish lengths but duplicate lengths have been removed.

The lengths of known fish distributions are based on the blueline route length, see codes listed above in section 2.1.1. These lengths include the lengths of waterbodies. However, there are cases when the FISS is combined with BTM Land Use data to identify stream side land use types, that fish lengths in waterbodies may be lost. The FISS data is represented as a single flow line drawn through the middle of a waterbody at 1:50,000 scale. When this line overlaps and waterbody from the BTM Land Use mapping at 1:250,000 scale, it is not possible to obtain the land use type next to the fish length because the result would be zero. Therefore we have also included attributes representing fish lengths that fall in BTM Land Use waterbodies (WFRE and WSAL; fresh water and salt water).

Macro-Reaches

The Macro-reach coverage was obtained from the Ministry of Fisheries ftp site. The zones were digitized off of paper Federal NTS 1:50,000 mapping and are linked to the 1:50,000 blueline streams that the watershed boundaries are based on (Watershed Atlas). The macro-reaches are also based on the blueline route length therefore lengths include flows through a waterbody, see codes listed above in section 2.1.1. The reaches are broken down by parts of a stream which have a repetitive set of similar characteristics such as stream gradient, discharge, substrate type, channel type, position in landscape and valley flat width from NTS 1:50,000 maps. The gradient field is used to display stream lengths and logged stream lengths in specific gradient ranges of 0-2, 2-8, 8-12, 12-16, 16-20 and >20%.

TRIM Base Mapping

The *Watersheds BC: Watershed Ranking and Assessment Product* uses roads and rivers from the 1:20 000 TRIM base map database for BC. Topographic attributes (of which gradient categories are the most important) are obtained from a raster (25 metre pixel) of elevations derived from the irregular elevation points in the TRIM database.

TRIM Roads and Streams

Roads and rivers in the TRIM database are mapped to an accuracy of +/- 10 metres horizontally using photogrammetric techniques. The majority of BC is based on 1987 and 1988 aerial photography. The actual date of the air photography is included as an attribute to the *Watersheds BC: Watershed Ranking and Assessment Product* results. When the TRIM database was produced only streams greater than 200 metres were included. Therefore there are small streams and intermittent streams that are not mapped in the TRIM database.

TRIM Roads include paved, unpaved and rough roads. Transportation features such as tunnels, bridges and snowsheds are included as the road length. Bridges have been included as a road stream crossing. When a road stream crossing is counted for a double line river, it is only counted once.

The TRIM II program which is updating the TRIM database from new aerial photography is addressing these issues and mapping the new roads and small streams. A Provincial up-date cycle will take about five years. TRIM II information is not included in this version of *Watersheds BC: Watershed Ranking and Assessment Product* but will be included in subsequent versions. Not only will the new road mapping give a more current result but the trends in road construction will also be available.

Users will sometimes notice that TRIM streams may cross-watershed boundaries (heights of land). This is to be expected considering the different scales of mapping, watershed boundaries from the Watershed Atlas at 1: 50 000 and streams from TRIM at 1:20 000.

TRIM DEM

The *Watersheds BC: Watershed Ranking and Assessment Product* uses the TRIM 25 metre pixel raster DEM to calculate elevation, aspect and slope. The raster DEM was constructed through a Triangulated Irregular Network (TIN) process that included all of the "breakline" and hydrographic data in the TRIM database, thereby maintaining the accuracy and precision of the TRIM elevation database. The *Watersheds BC: Watershed Ranking and Assessment Product* identifies roads, logged areas and streams on potentially unstable slopes characterized by slopes thresholds of >50%, >60% and >70%. Topographic characterizations for each watershed based on elevation, slope and aspect is calculated from the TRIM DEM.

BTM Land Use

The Baseline Thematic Mapping (BTM) Land Use / Ground Cover is an interpretation based on satellite imagery (Landsat TM), air photography, and 1:20 000 MOF forest cover inventory. The mapping was compiled onto a 1:250k NTS base map with a corresponding positional accuracy (+/- 300 metres) and captures areas as small as 15 hectares, therefore essentially capturing all logging. There are 20 broad classes of land use / ground cover identified in the BTM database. Forest land is classified into 5 classes: old forest (>140 yr), young forest (>20 and <140 yr), recently logged (last 20 yr), selectively logged (last 20 yr), and

recently burned (last 20 yr). Logged areas in the *Watersheds BC: Watershed Ranking and Assessment Product*, are defined as recently logged and recently burned areas on the coast whereas for the interior, selective logging will also be included. Only lakes or reservoirs over 25 ha in size are included in the fresh water class. Typically the BTM land use is from satellite imagery that is 1 to 4 years old. The date of the satellite image is an attribute that is included in the *Watersheds BC: Watershed Ranking and Assessment Product* results. As well when the BTM database is up-dated (beginning in 1999/2000) the changes in land use will be added as attributes to the *Watersheds BC: Watershed Ranking and Assessment Product* results. This will highlight trends in land use change and allow monitoring on a watershed basis.

BTM Present Land Use Class Definitions

Minimum Areas Mapped	DBASE CODE	Land Use	Definition
15 ha	AGR	Agriculture	Land based agricultural activities undifferentiated as to crop (i.e. land is used as the producing medium).
15 ha	AGMX	Residential Agriculture Mixtures	Areas where agriculture activities are intermixed with residential and other buildings with a building density of between 2 to 0.2 per hectare.
50 ha	ALP	Alpine	Areas virtually devoid of trees at high elevations.
30 ha	AVA	Subalpine Avalanche Chutes	Areas below the tree line that are devoid of forest growth due primarily to snow avalanches. Usually herb or shrub covered.
30 ha	BARE	Barren Surfaces	Rock barrens, badlands, sand and gravel flats, dunes and beaches where unvegetated surfaces predominate.
30 ha	BURN	Recently Burned	Areas virtually devoid of trees due to fire within the past 20 years. Forest less than or equal to 15% cover.
15 ha	EST	Estuaries	Salt water mud flats and intertidal areas at the mouth of rivers and creeks where the vegetation is influenced by frequent flooding (at least yearly).
Minimum Areas	DBASE CODE	Land Use	Definition

Mapped

50 ha	**FO**	**Old Forest**	Forest greater than or equal to 140 years old and greater than 6 meters in height. Areas defined as Recently Logged and Selectively Logged land uses are excluded from this class.
50 ha	**FY**	**Young Forest**	Forest less than 140 years old and greater than 6 metres in height. Areas defined as Recently Logged and Selectively Logged land uses are excluded from this class.
50 ha	**ICE**	**Glaciers and Snow**	Glaciers and permanent snow. Depending on the date of imagery, ephemeral snow may be included in this class.
15 ha	**LOG**	**Recently Logged**	Timber harvesting within the past 20 years, or older if tree cover is less than 40% and under 6 metres in height.
30 ha	**LOGS**	**Selectively Logged**	Areas where the practice of selective logging can be clearly interpreted on the Landsat TM image and TRIM aerial photography.
15 ha	**MINE**	**Mining**	Land used now (or in the past and remains unreclaimed) for the surface extraction of minerals or quarry materials.
30 ha	**RANG**	**Rangelands**	Unimproved pasture and grasslands based on cover rather than use. Cover includes drought tolerant grasses, sedges, and scattered shrubs to 6 metres in height and less than 35% forest cover. Sparse forest stands are included with their understorey of drought tolerant shrubs and herbs.
30 ha	**REC**	**Recreation Activities**	Land used for private or public outdoor recreational purposes. Ski resorts and golf courses are included. This class does not include recreational areas within built-up portions of cities, towns and villages, which are mapped as urban areas. This class includes waterfront cottage areas if they are at least 200 metres wide.
15 ha	**URB**	**Urban**	All compact settlements including built up areas of cities, towns and villages as well as isolated units away from settlements such as manufacturing plants, rail yards and military camps. In most cases residential use will predominate in these areas. Open space that forms an integral part of the urban agglomeration, e.g. parks, golf courses, etc. are included as urban.
15 ha	**WET**	**Wetlands**	Wetlands including swamps, marshes, bogs or fens. This class excludes lands with evidence or knowledge of haying or grazing in drier years.

Minimum Areas Mapped	DBASE CODE	Land Use	Definition
15 ha	**WFRE**	**Fresh Water**	Fresh water bodies (lakes, reservoirs and wide portions of major rivers).
15 ha	**WSAL**	**Salt Water**	Salt water (oceans). Areas defined as the Estuaries land use are excluded from this class.
15 ha	**SHRB**	**Shrubs**	Naturally occurring shrub areas with a least 50% coverage. <u>Not</u> wetlands, shrub covered logged areas (or other man-made disturbance), alpine, subalpine avalanche chutes or rangelands. This class of cover occurs in northern BC on mid-slope positions or along valley bottoms that act as frost pockets. The class also occurs over large areas of northern BC, frequently adjacent to alpine areas where the Ministry of Forests does not recognize the land as having potential to grow merchantable tree species.

CDMS

Scale 1:250 000

MinFile

Scale is 1:50 000. Most of the points are within 500 metres, others are within 1 km or 5 km.

Ecosection

The ecosection coverage was obtained from the BC Environment Ecoregion Ecosystem Classification Units file on the Ministry of Environment, Lands and Parks Wildlife ftp site. The file is a provincial coverage and was digitized from NTS 1:250 000 scale maps and has a modified resolution of 250 metres. The file was produced in September 1995.

BEC

Resolution is 1:250 000 except for Kamloops 1:100 000 and Prince Rupert region, east of 132 degrees longitude is 1:500 000.

Community Watersheds

The Community Watersheds were obtained from the Ministry of Environment, Lands and Parks ftp site. The community watersheds are as defined in section 41(8) of the Forest Practices Code. The boundaries were first delineated and then digitized on TRIM contour maps 1:20 000. The resolution is 10 metres. This coverage was downloaded on February 23, 1999, the last change occurred to the file on February 19, 1999.

Ministry of Forests: District and Region

The Ministry of Forests District and Region boundaries were captured at 1:250 000 and have an accuracy of +/- 400 metres or more. This file was obtained from the Ministry of Environment, Lands and Parks ftp site.

ATTRIBUTE TABLES

The summary measurements produced by the *Watersheds BC: Watershed Ranking and Assessment Product* will be in a tabular format (.dbf). For each watershed group (of which there are 246 covering BC) the results will be broken down into 10 categories and 2 subcategories for each. These are listed and described below:

Basic Information   Basic geographic information related to the watershed (see section 3.1 for details on attributes).

Roads   Attributes related to road information from the TRIM Base: TRIM Roads and Streams 1:20 000 scale mapping (see section 3.2 for details on attributes).

1:50 000 Rivers   Attributes related to the blueline streams from the Watershed Atlas: 1:50 000 scale mapping (see section 3.3 for details on attributes).

Fish   Attributes related to fish from BC Fisheries *Fish Information Summary System* (see section 3.4 for details on attributes).

1:20 000 Rivers   Attributes related to streams from the TRIM Base: TRIM Roads and Streams 1:20 000 scale mapping (see section 3.5 for details on attributes).

Riparian   Attributes related to riparian zones on streams from TRIM Base: TRIM Roads and Streams 1:20 000 scale mapping (see section 3.6 for details on attributes).

Forest Land Use   Attributes related to forest type land use from the Baseline Thematic Mapping (see section 3.7 for details on attributes).

Non-Forest Land Use   Attributes related to non-forest types of land use from the Baseline Thematic Mapping (see section 3.8 for details on attributes).

Ecology   Attributes related to ecological classifications (see section 3.9 for details on attributes).

Terrain   Attributes related to topography (see section 3.10 for details on attributes).

Basic Information

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
gis_tag	Unique GIS identifier	Watershed GIS tag identification code. Unique identifier for polygons. Exists for all watersheds whereas the watershed code may not.	character		Watershed Atlas
code	Watershed Code	1:50 000 scale Watershed Atlas hierarchical watershed code (45 digit number).	integer		Watershed Atlas
code_short	Shortened Watershed Code	Shortened version of the Watershed Atlas code. Unnecessary groups of zeroes are removed.	character		Watershed Atlas

name	Watershed name	Watershed name (where it is known).	character		Watershed Atlas
albers_n	Albers Northing	Albers Northing coordinate of watershed centroid.	m	0	Watershed Atlas
albers_e	Albers Easting	Albers Easting coordinate of watershed centroid.	m	0	Watershed Atlas
latitude	Latitude of centroid	Latitude coordinate of watershed centroid.	decimal degrees	5	Watershed Atlas
longitude	Longitude of centroid	Longitude coordinate of watershed centroid.	decimal degrees	5	Watershed Atlas
trim_year	Year of TRIM air photography	Year of the air photography that was the source for the TRIM base map compilation. If the TRIM mapping coverage for a watershed is of different vintages then the date chosen is that of the majority coverage.	year		Watershed Atlas TRIM Vintage
trim_month	Month of TRIM air photography	Month of the air photography that was the source for the TRIM base map compilation. If the TRIM mapping coverage for a watershed is of different vintages then the date chosen is that of the majority coverage.	month		Watershed Atlas TRIM Vintage
btm_year	Year of BTM Land Use satellite imagery	Year of the satellite imagery that was the source for the BTM Land Use map compilation. If the BTM Land Use mapping coverage for a watershed is of different vintages then the date chosen is that of the majority coverage.	year		Watershed Atlas BTM Vintage
btm_month	Month of BTM Land Use satellite imagery	Month of the satellite imagery that was the source for the BTM Land Use map compilation. If the BTM Land Use mapping coverage for a watershed is of different vintages then the date chosen is that of the majority coverage.	month		Watershed Atlas BTM Vintage
btm_day	Day of BTM Land Use satellite imagery	Day of the satellite imagery that was the source for the BTM Land Use map compilation. If the BTM Land Use mapping coverage for a watershed is of different vintages then the date chosen is that of the majority coverage.	day		Watershed Atlas BTM Vintage
mof_dis	Ministry of Forests District	Ministry of Forests District name.	character		Watershed Atlas MELP's ftp site: MOF region and district boundaries
mof_reg	Ministry of Forests Region	Ministry of Forests Region name.	character		Watershed Atlas MELP's ftp site: MOF

					region and district boundaries

Roads

Absolute Attributes for Roads

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
road_k	Total 3D road length	Total 3D road length in the watershed (from TRIM base maps: 1:20 000 scale mapping).	km	3	Watershed Atlas TRIM Roads & Streams
road_f_k	3D road length on forest land	3D road length on forest land in the watershed. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams
road_lo_k	3D road length at <300 m elevation	3D road length under 300 metres elevation.	km	3	Watershed Atlas TRIM Roads & Streams TRIM DEM
road_m_k	3D road length at 300-800 m elevation	3D road length between 300 and 800 metres elevation.	km	3	Watershed Atlas TRIM Roads & Streams TRIM DEM
road_hi_k	3D road length at >800 m elevation	3D road length over 800 metres elevation.	km	3	Watershed Atlas TRIM Roads & Streams TRIM DEM
road_50_k	3D road length on a gradient >50 %	3D road length on a gradient greater than 50%.	km	3	Watershed Atlas TRIM Roads & Streams TRIM DEM
road_60_k	3D road length on a gradient >60 %	3D road length on a gradient greater than 60%.	km	3	Watershed Atlas TRIM Roads & Streams TRIM DEM

road_70_k	3D road length on a gradient >70 %	3D road length on a gradient greater than 70%.	km	3	Watershed Atlas TRIM Roads & Streams TRIM DEM
str_rd	Total # road-stream crossings	Total number of road-stream crossings in a watershed. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream.	integer	0	Watershed Atlas TRIM Roads & Streams
str_rd_f	# Road-stream crossings on forest land	Number of road-stream crossings on forest land in a watershed. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	integer	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
str_rd_50	# Road-stream crossings on a gradient >50%	Number of road-stream crossings on a gradient greater than 50%. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream.	integer	0	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_rd_60	# Road-stream crossings on a gradient >60%	Number of road-stream crossings on a gradient greater than 60%. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream.	integer	0	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_rd_70	# Road-stream crossings on a gradient >70%	Number of road-stream crossings on a gradient greater than 70%. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream.	integer	0	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_rf_50	# Road-stream crossings on forest land on a gradient >50%	Number of road-stream crossings on a gradient greater than 50% on forest land. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	integer	0	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_rf_60	# Road-stream crossings on forest land on a gradient >60%	Number of road-stream crossings on a gradient greater than 60% on forest land. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest,	integer	0	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM

		Recently Logged, Selectively Logged, and Recently Burned).			
str_rf_70	# Road-stream crossings on forest land on a gradient >70%	Number of road-stream crossings on a gradient greater than 70% on forest land. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	integer	0	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM

Density Attributes for Roads

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
road_d	Total 3D road length density	Total 3D road length density in the watershed. Derived by dividing the total 3D road length by the land area of the watershed.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams
road_f_d	3D road length density on forest land	3D road length density on forest land in the watershed. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This value is derived by dividing the 3D road length on forest land by the forest land area.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams
road_lo_d	3D road length density at <300 m elevation	3D road length density under 300 metres elevation. Derived by dividing the 3D road length under 300 metres elevation by the land area of the watershed.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
road_m_d	3D road length density at 300-800 m elevation	3D road length density between 300 and 800 metres elevation. Derived by dividing the 3D road length between 300 and 800 metres elevation by the land area of the watershed.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM

road_hi_d	3D road length density at >800 m elevation	3D road length density over 800 metres elevation. Derived by dividing the 3D road length over 800 metres elevation by the land area of the watershed.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
road_50_d	3D road length density on a gradient >50%	3D road length density on a gradient greater than 50%. Derived by dividing the 3D road length on a gradient greater than 50% by the land area of the watershed.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
road_60_d	3D road length density on a gradient >60%	3D road length density on a gradient greater than 60%. Derived by dividing the 3D road length on a gradient greater than 60% by the land area of the watershed.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
road_70_d	3D road length density on a gradient >70%	3D road length density on a gradient greater than 70%. Derived by dividing the 3D road length on a gradient greater than 70% by the land area of the watershed.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_rd_d	Total road-stream crossing density	Total density of road-stream crossings in a watershed. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Derived by dividing the total number of road-stream crossings by the watershed land area.	# / ha	3	Watershed Atlas BTM Land Use TRIM Roads & Streams
str_rd_f_d	Road-stream crossing density on forest land	Density of road-stream crossings on forest land in a watershed. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream.Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). Derived by dividing the number of road-stream crossings on forest land by the watershed forest land area.	# / ha	3	Watershed Atlas BTM Land Use TRIM Roads & Streams
str_rd_50d	Road-stream crossing density on a gradient >50%	Road-stream crossing density on a gradient greater than 50%. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Derived by dividing the number of road-stream crossings on a gradient greater than 50% by the watershed land area.	# / ha	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_rd_60d	Road-stream crossing density on a gradient >60%	Road-stream crossing density on a gradient greater than 60%. Road-stream crossings include bridge crossings.	# / ha	3	Watershed Atlas BTM Land Use

		Bridge-stream crossings are only counted once per stream. Derived by dividing the number of road-stream crossings on a gradient greater than 60% by the watershed land area.			TRIM Roads & Streams TRIM DEM
str_rd_70d	Road-stream crossing density on a gradient >70%	Road-stream crossing density on a gradient greater than 70%. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Derived by dividing the number of road-stream crossings on a gradient greater than 70% by the watershed land area.	# / ha	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_rf_50d	Road-stream crossing density on forest land on a gradient >50%	Road-stream crossing density on a gradient greater than 50% on forest land. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). Derived by dividing the forest land number of road-stream crossings on a gradient greater than 50% by the watershed forest land area.	# / ha	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_rf_60d	Road-stream crossing density on forest land on a gradient >60%	Road-stream crossing density on a gradient greater than 60% on forest land. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). Derived by dividing the forest land number of road-stream crossings on a gradient greater than 60% by the watershed forest land area.	# / ha	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_rf_70d	Road-stream crossing density on forest land on a gradient >70%	Road-stream crossing density on a gradient greater than 70% on forest land. Road-stream crossings include bridge crossings. Bridge-stream crossings are only counted once per stream. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). Derived by dividing the forest land number of road-stream crossings on a gradient greater than 70% by the watershed forest land area.	# / ha	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM

1:50 000 Rivers

Absolute Attributes for 1:50 000 Rivers

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
bl_str_k	Blueline surface water stream length	Blueline surface water stream length in a watershed (from NTS 1:50 000 scale mapping). This length is used for attributes pertaining to the mainstem and headwater streams. This length does not include the length of lakes, wetlands or man-made waterbodies. This length is determined from the arc feature codes in the Watershed Atlas.	km	3	Watershed Atlas
bl_route_k	Blueline route length for Macro-reaches and FISS	Blueline route length used to build the Macro-reaches and FISS (from NTS 1:50 000 scale mapping). This length is used to calculate percentages for attributes using Macro-reaches and FISS. This length includes the length of lakes, wetlands and man-made waterbodies. The length is determined from the arc feature codes in the Watershed Atlas.	km	3	Watershed Atlas
bl_lakes_k	Blueline waterbody length	Blueline waterbody length in a watershed (from NTS 1:50 000 scale mapping). This length includes lakes, wetlands and man-made waterbodies that are connected to the stream network and that are isolated (not connected by the stream network). The length is determined from the arc feature codes in the Watershed Atlas.	km	3	Watershed Atlas
bl_str_f_k	Blueline surface water stream length on forest land	Blueline surface water stream length on forest land. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This length does not	km	3	Watershed Atlas BTM Land Use

		include the length of lakes, wetlands or man-made waterbodies.			
mainstem_k	Blueline mainstem length	Length of the watershed's blueline mainstem. The mainstem is defined as the length of stream in a watershed that has the simplest watershed code. This length is calculated from the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies.	km	3	Watershed Atlas
main_log_k	Blueline mainstem length logged	Length of the watershed's blueline mainstem that is logged and selectively logged to the bank. The mainstem is defined as the length of stream in a watershed that has the simplest watershed code. This length is calculated from the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies.	km	3	Watershed Atlas BTM Land Use
main_for_k	Blueline mainstem length on forest land	Length of the watershed's blueline mainstem on forest land. The mainstem is defined as the length of stream in a watershed that has the simplest watershed code. This length is calculated from the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas BTM Land Use
hw_k	Blueline headwater stream length	Blueline headwater stream length in a watershed. Headwater streams are defined as first order streams on a gradient greater than 60%. This length is calculated from the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies.	km	3	Watershed Atlas TRIM DEM
hw_log_k	Blueline headwater stream length logged	Blueline headwater stream length that is logged or selectively logged to the bank. Headwater streams are defined as first order streams on a gradient greater than 60%. This length is calculated from the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies.	km	3	Watershed Atlas BTM Land Use TRIM DEM
hw_for_k	Blueline headwater stream length on forest land	Blueline headwater stream length on forest land in a watershed. Headwater streams are defined as first order	km	3	Watershed Atlas BTM Land Use

		streams on a gradient greater than 60%. This length is calculated from the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).			TRIM DEM
bl_0_2_k	Blueline stream length on gradient 0-2%	Blueline stream length on a gradient between 0 and 2%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Macro-Reach
bl_2_8_k	Blueline stream length on gradient 2-8%	Blueline stream length on a gradient between 2 and 8%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Macro-Reach
bl_8_12_k	Blueline stream length on gradient 8-12%	Blueline stream length on a gradient between 8 and 12%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Macro-Reach
bl_12_16_k	Blueline stream length on gradient 12-16%	Blueline stream length on a gradient between 12 and 16%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Macro-Reach
bl_16_20_k	Blueline stream length on gradient 16-20%	Blueline stream length on a gradient between 16 and 20%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Macro-Reach
bl_20_up_k	Blueline stream length on gradient >20%	Blueline stream length on a gradient greater than 20%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Macro-Reach
bll_0_2k	Blueline stream length logged on gradient 0-2%	Blueline stream length logged and selectively logged to the bank that are on a gradient between 0 and 2%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the	km	3	Watershed Atlas Macro-Reach BTM Land Use

		BTM Land Use (1:250 000 scale) will be excluded.			
bll_2_8k	Blueline stream length logged on gradient 2-8%	Blueline stream length logged and selectively logged to the bank that are on a gradient between 2 and 8%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded.	km	3	Watershed Atlas Macro-Reach BTM Land Use
bll_8_12k	Blueline stream length logged on gradient 8-12%	Blueline stream length logged and selectively logged to the bank that are on a gradient between 8 and 12%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded.	km	3	Watershed Atlas Macro-Reach BTM Land Use
bll_12_16k	Blueline stream length logged on gradient 12-16%	Blueline stream length logged and selectively logged to the bank that are on a gradient between 12 and 16%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded.	km	3	Watershed Atlas Macro-Reach BTM Land Use
bll_16_20k	Blueline stream length logged on gradient 16-20%	Blueline stream length logged and selectively logged to the bank that are on a gradient between 16 and 20%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded.	km	3	Watershed Atlas Macro-Reach BTM Land Use
bll_20_upk	Blueline stream length logged on gradient >20%	Blueline stream length logged and selectively logged to the bank that are on a gradient greater than 20%. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded.	km	3	Watershed Atlas Macro-Reach BTM Land Use

Density Attributes for 1:50 000 Rivers

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
bl_str_d	Blueline surface water stream length density	Blueline surface water stream length density in a watershed (from NTS 1:50 000 scale mapping). This density does not include the length of lakes, wetlands or man-made waterbodies. Derived by dividing the blueline surface water stream length by the watershed land area.	km/km2	2	Watershed Atlas
bl_str_p	% Blueline surface water stream length	Percentage of blueline surface water stream length in a watershed (from NTS 1:50 000 scale mapping). This percentage does not include the length of lakes, wetlands or man-made waterbodies. Derived by dividing the blueline surface water stream length by the blueline route length of the watershed.	%	1	Watershed Atlas
bl_str_f_p	% Blueline surface water stream length on forest land	Percentage of blueline surface water stream length on forest land. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage does not include the length of lakes, wetlands or man-made waterbodies. This percentage is derived by dividing the blueline surface water stream length on forest land by the blueline surface water stream length of the watershed.	%	1	Watershed Atlas BTM Land Use
main_log_p	% Blueline mainstem length logged	Percentage of the watershed blueline mainstem length that is logged and selectively logged to the bank. The mainstem is defined as the length of stream in a watershed that has the simplest watershed code. This percentage uses the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies. This percentage is derived by dividing the mainstem length logged by the mainstem length of the watershed.	%	1	Watershed Atlas BTM Land Use
main_for_p	% Blueline mainstem length on forest land	Percentage of the watershed blueline mainstem length on forest land. The mainstem is defined as the length of stream in a watershed that has the simplest watershed code. This percentage uses the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies. Forest land is	%	1	Watershed Atlas BTM Land Use

		comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the mainstem length on forest land by the total length of the mainstem.			
hw_p	% Blueline headwater stream length	Percentage of blueline headwater stream length. Headwater streams are defined as first order streams on a gradient greater than 60%. This percentage uses the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies. This percentage is derived by dividing the headwater stream length by the blueline surface water stream length of the watershed.	%	1	Watershed Atlas TRIM DEM
hw_log_p	% Blueline headwater stream length logged	Percentage of blueline headwater stream length that is logged or selectively logged to the bank. Headwater streams are defined as first order streams on a gradient greater than 60%. This percentage uses the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies. This percentage is derived by dividing the logged headwater stream length by the headwater stream length of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
hw_for_p	% Blueline headwater stream length on forest land.	Percentage of blueline headwater stream length on forest land. Headwater streams are defined as first order streams on a gradient greater than 60%. This percentage uses the blueline surface water stream length and does not include the length of lakes, wetlands or man-made waterbodies. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the headwater stream length on forest land by the headwater stream length of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
bl_0_2_p	% Blueline stream length on gradient 0-2%	Percentage of blueline stream length on a gradient between 0 and 2%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the stream length between gradients of 0 and 2% by the blueline surface water stream length of the watershed.	%	1	Watershed Atlas Macro-Reach

bl_2_8_p	% Blueline stream length on gradient 2-8%	Percentage of blueline stream length on a gradient between 2 and 8%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the stream length between gradients of 2 and 8% by the blueline surface water stream length of the watershed.	%	1	Watershed Atlas Macro-Reach
bl_8_12_p	% Blueline stream length on gradient 8-12%	Percentage of blueline stream length on a gradient between 8 and 12%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the stream length between gradients of 8 and 12% by the blueline surface water stream length of the watershed.	%	1	Watershed Atlas Macro-Reach
bl_12_16_p	% Blueline stream length on gradient 12-16%	Percentage of blueline stream length on a gradient between 12 and 16%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the stream length between gradients of 12 and 16% by the blueline surface water stream length of the watershed.	%	1	Watershed Atlas Macro-Reach
bl_16_20_p	% Blueline stream length on gradient 16-20%	Percentage of blueline stream length in a watershed that are on a gradient between 16 and 20%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the stream length between gradients of 16 and 20% by the blueline surface water stream length of the watershed.	%	1	Watershed Atlas Macro-Reach
bl_20_up_p	% Blueline stream length on gradient >20%	Percentage of blueline stream length in a watershed that are on a gradient greater than 20%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the stream length with a gradient of greater than 20% by the blueline surface water stream length of the watershed.	%	1	Watershed Atlas Macro-Reach
bll_0_2p	% Blueline stream length logged on gradient 0-2%	Percentage of blueline stream length logged and selectively logged to the bank that are on a gradient between 0 and 2%. This percentage uses the blueline	%	1	Watershed Atlas Macro-Reach BTM Land Use

		route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded. This percentage is derived by dividing the logged blueline stream length between gradients of 0 and 2% by the blueline stream length between gradients of 0 and 2%.			
bll_2_8p	% Blueline stream length logged on gradient 2-8%	Percentage of blueline stream length logged and selectively logged to the bank that are on a gradient between 2 and 8%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded. This percentage is derived by dividing the logged blueline stream length between gradients of 2 and 8% by the blueline stream length between gradients of 2 and 8%.	%	1	Watershed Atlas Macro-Reach BTM Land Use
bll_8_12p	% Blueline stream length logged on gradient 8-12%	Percentage of blueline stream length logged and selectively logged to the bank that are on a gradient between 8 and 12%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded. This percentage is derived by dividing the logged blueline stream length between gradients of 8 and 12% by the blueline stream length between gradients of 8 and 12%.	%	1	Watershed Atlas Macro-Reach BTM Land Use
bll_12_16p	% Blueline stream length logged on gradient 12-16%	Percentage of blueline stream length logged and selectively logged to the bank that are on a gradient between 12 and 16%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded. This percentage is derived by dividing the logged blueline stream length between gradients of 12 and 16% by the blueline stream length between gradients of 12 and 16%.	%	1	Watershed Atlas Macro-Reach BTM Land Use

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
bll_16_20p	% Blueline stream length logged on gradient 16-20%	Percentage of blueline stream length logged and selectively logged to the bank that are on a gradient between 16 and 20%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded. This percentage is derived by dividing the logged blueline stream length between gradients of 16 and 20% by the blueline stream length between gradients of 16 and 20%.	%	1	Watershed Atlas Macro-Reach BTM Land Use
bll_20_upp	% Blueline stream length logged on gradient >20%	Percentage of blueline stream length logged and selectively logged to the bank that are on a gradient greater than 20%. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody such as a lake, wide river or estuary, in the BTM Land Use (1:250 000 scale) will be excluded. This percentage is derived by dividing the logged blueline stream length on a gradient greater than 20% by the blueline stream length on a gradient greater than 20%.	%	1	Watershed Atlas Macro-Reach BTM Land Use

Fish

Absolute Attributes for Fish

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
salmon_k	Blueline stream length with known salmon presence	Blueline stream length in a watershed with known presence of Salmon. Included in the salmon category are chinook, chum, coho, pink, sockeye and kokanee salmon.	km	3	Watershed Atlas Fish Information Summary System

		This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.			
salm_log_k	Blueline stream length logged with known salmon presence	Blueline stream length with known Salmon presence that has been logged and selectively logged to the bank. Included in the salmon category are chinook, chum, coho, pink, sockeye and kokanee salmon. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
salm_for_k	Blueline stream length with known salmon presence on forest land	Blueline stream length with known Salmon presence on forest land. Included in the salmon category are chinook, chum, coho, pink, sockeye and kokanee salmon. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
sport_k	Blueline stream length with known sport fish presence	Blueline stream length in a watershed with known presence of Sport fish. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Fish Information Summary System
sprt_log_k	Blueline stream length logged with known sport fish presence	Blueline stream length with known Sport fish presence that has been logged and selectively logged to the bank. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
sprt_for_k	Blueline stream length with known sport fish presence on forest land	Blueline stream length that has a known sport fish presence on forest land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or	km	3	Watershed Atlas Fish Information Summary System BTM Land Use

		wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).			
sport_pts	# Known location sites for sport fish	Number of location points representing known observation points of sport fish. These points may be located at a particular site or at the mouth of a channel where it is known that a particular species exists but its distribution zone is not known.	integer	0	Watershed Atlas Fish Information Summary System
other_k	Blueline stream length with known 'other' fish presence	Blueline stream length in a watershed with known presence of 'other' fish. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Fish Information Summary System
other_pts	# Known location sites for 'other' fish	Number of location points representing known observation points of 'other' fish. These points may be located at a particular site or at the mouth of a channel where it is know that a particular species exists but its distribution zone is not known.	integer	0	Watershed Atlas Fish Information Summary System
ch_k	Blueline stream length with known chinook salmon presence	Blueline stream length that has a known chinook salmon presence. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Fish Information Summary System
cm_k	Blueline stream length with known chum salmon presence	Blueline stream length that has a known chum salmon presence. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Fish Information Summary System
co_k	Blueline stream length with known coho salmon presence	Blueline stream length that has a known coho salmon presence. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Fish Information Summary System
pk_k	Blueline stream length with known pink salmon presence	Blueline stream length that has a known pink salmon presence. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Fish Information Summary System
sk_k	Blueline stream length with known sockeye salmon	Blueline stream length that has a known sockeye salmon presence. This length is calculated from the blueline route	km	3	Watershed Atlas Fish Information

	presence	length and includes the length of lakes, wetlands and man-made waterbodies.			Summary System
st_k	Blueline stream length with known steelhead presence	Blueline stream length that has a known steelhead presence. This category of steelhead also includes resident steelhead and upstream stocked steelhead from hatcheries. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Fish Information Summary System
bt_k	Blueline stream length with known bull trout presence	Blueline stream length that has a known bull trout presence. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies.	km	3	Watershed Atlas Fish Information Summary System
ch_for_k	Blueline stream length with known chinook salmon presence on forest land	Blueline stream length that has a known chinook salmon presence on forest land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
cm_for_k	Blueline stream length with known chum salmon presence on forest land	Blueline stream length that has a known chum salmon presence on forest land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
co_for_k	Blueline stream length with known coho salmon presence on forest land	Blueline stream length that has a known coho salmon presence on forest land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas Fish Information Summary System BTM Land Use

pk_for_k	Blueline stream length with known pink salmon presence on forest land	Blueline stream length that has a known pink salmon presence on forest land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
sk_for_k	Blueline stream length with known sockeye salmon presence on forest land	Blueline stream length that has a known sockeye salmon presence on forest land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
st_for_k	Blueline stream length with known steelhead presence on forest land	Blueline stream length that has a known steelhead presence on forest land. This category of steelhead also includes resident steelhead and upstream stocked steelhead from hatcheries. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
bt_for_k	Blueline stream length with known bull trout presence on forest land	Blueline stream length that has a known bull trout presence on forest land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
ch_urb_k	Blueline stream length with	Blueline stream length that has a known chinook salmon	km	3	Watershed Atlas

	known chinook salmon presence on urban and agricultural/ residential land	presence on urban and mixed agricultural and residential land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.			Fish Information Summary System BTM Land Use
cm_urb_k	Blueline stream length with known chum salmon presence on urban and agricultural/ residential land	Blueline stream length that has a known chum salmon presence on urban and mixed agricultural and residential land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
co_urb_k	Blueline stream length with known coho salmon presence on urban and agricultural/ residential land	Blueline stream length that has a known coho salmon presence on urban and mixed agricultural and residential land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
pk_urb_k	Blueline stream length with known pink salmon presence on urban and agricultural/ residential land	Blueline stream length that has a known pink salmon presence on urban and mixed agricultural and residential land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
sk_urb_k	Blueline stream length with known sockeye salmon presence on urban and agricultural/ residential land	Blueline stream length that has a known sockeye salmon presence on urban and mixed agricultural and residential land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
st_urb_k	Blueline stream length with known steelhead presence on urban and agricultural/ residential land	Blueline stream length that has a known steelhead presence on urban and mixed agricultural and residential land. This category of steelhead also includes resident steelhead and upstream stocked steelhead from hatcheries. This length is calculated from the blueline	km	3	Watershed Atlas Fish Information Summary System BTM Land Use

		route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.			
bt_urb_k	Blueline stream length with known bull trout presence on urban and agricultural/ residential land	Blueline stream length that has a known bull trout presence on urban and mixed agricultural and residential land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
sprt_urb_k	Blueline stream length with known sport fish presence on urban and agricultural/ residential land	Blueline stream length that has a known sport fish presence on urban and mixed agricultural and residential land. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
ch_agr_k	Blueline stream length with known chinook salmon presence on agricultural land/rangeland	Blueline stream length that has a known chinook salmon presence on agricultural land/rangeland . This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
cm_agr_k	Blueline stream length with known chum salmon presence on agricultural land/ rangeland	Blueline stream length that has a known chum salmon presence on agricultural land/rangeland. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
co_agr_k	Blueline stream length with known coho salmon presence on agricultural land/rangeland	Blueline stream length that has a known coho salmon presence on agricultural land/rangeland. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use

pk_agr_k	Blueline stream length with known pink salmon presence on agricultural land/rangeland	Blueline stream length that has a known pink salmon presence on agricultural land/rangeland. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
sk_agr_k	Blueline stream length with known sockeye salmon presence on agricultural land/ rangeland	Blueline stream length that has a known sockeye salmon presence on agricultural land/rangeland. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
st_agr_k	Blueline stream length with known steelhead presence on agricultural land/ rangeland	Blueline stream length that has a known steelhead presence on agricultural land/rangeland. This category of steelhead also includes resident steelhead and upstream stocked steelhead from hatcheries. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
bt_agr_k	Blueline stream length with known bull trout presence on agricultural land/ rangeland	Blueline stream length that has a known bull trout presence on agricultural land/rangeland. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
sprt_agr_k	Blueline stream length with known sport fish presence on agricultural land/ rangeland	Blueline stream length that has a known sport fish presence on agricultural land/rangeland. This length is calculated from the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
salm_watrk	Blueline stream length with	Blueline stream length in a watershed with known salmon	km	3	Watershed Atlas

	known salmon presence intersecting with BTM Land Use fresh or salt water.	presence intersecting with BTM Land Use fresh water (WFRE) or salt water (WSAL). Included in the salmon category are chinook, chum, coho, pink, sockeye and kokanee salmon. This length represents the length of waterbodies (lakes, man-made waterbodies, wide rivers) from the BTM Land Use (1:250 000 scale), that have a salmon presence. .			Fish Information Summary System BTM Land Use
sprt_watrk	Blueline stream length with known sport fish presence intersecting with BTM Land Use fresh or salt water.	Blueline stream length in a watershed with known sport fish presence intersecting with BTM Land Use fresh water (WFRE) or salt water (WSAL). This length represents the length of waterbodies (lakes, man-made waterbodies, wide rivers) from the BTM Land Use (1:250 000 scale), that have a sport fish presence.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
ch_watr_k	Blueline stream length with known chinook salmon presence intersecting with BTM Land Use fresh or salt water.	Blueline stream length in a watershed with known chinook salmon presence intersecting with BTM Land Use fresh water (WFRE) or salt water (WSAL). This length represents the length of waterbodies (lakes, man-made waterbodies, wide rivers) from the BTM Land Use (1:250 000 scale), that have a chinook salmon presence.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
cm_watr_k	Blueline stream length with known chum salmon presence intersecting with BTM Land Use fresh or salt water.	Blueline stream length in a watershed with known chum salmon presence intersecting with BTM Land Use fresh water (WFRE) or salt water (WSAL). This length represents the length of waterbodies (lakes, man-made waterbodies, wide rivers) from the BTM Land Use (1:250 000 scale), that have a chum salmon presence.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
co_watr_k	Blueline stream length with known coho salmon presence intersecting with BTM Land Use fresh or salt water.	Blueline stream length in a watershed with known coho salmon presence intersecting with BTM Land Use fresh water (WFRE) or salt water (WSAL). This length represents the length of waterbodies (lakes, man-made waterbodies, wide rivers) from the BTM Land Use (1:250 000 scale), that have a coho salmon presence.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
pk_watr_k	Blueline stream length with known pink salmon presence intersecting with BTM Land Use fresh or salt water.	Blueline stream length in a watershed with known pink salmon presence intersecting with BTM Land Use fresh water (WFRE) or salt water (WSAL). This length represents the length of waterbodies (lakes, man-made waterbodies, wide rivers) from the BTM Land Use (1:250 000 scale), that have a pink salmon presence.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
sk_watr_k	Blueline stream length with	Blueline stream length in a watershed with known	km	3	Watershed Atlas

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
	known sockeye salmon presence intersecting with BTM Land Use fresh or salt water.	sockeye salmon presence intersecting with BTM Land Use fresh water (WFRE) or salt water (WSAL). This length represents the length of waterbodies (lakes, man-made waterbodies, wide rivers) from the BTM Land Use (1:250 000 scale), that have a sockeye salmon presence.			Fish Information Summary System BTM Land Use
st_watr_k	Blueline stream length with known steelhead presence intersecting with BTM Land Use fresh or salt water.	Blueline stream length in a watershed with known steelhead presence intersecting with BTM Land Use fresh water (WFRE) or salt water (WSAL). This length represents the length of waterbodies (lakes, man-made waterbodies, wide rivers) from the BTM Land Use (1:250 000 scale), that have a steelhead presence.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use
bt_watr_k	Blueline stream length with known bull trout presence intersecting with BTM Land Use fresh or salt water.	Blueline stream length in a watershed with known bull trout presence intersecting with BTM Land Use fresh water (WFRE) or salt water (WSAL). This length represents the length of waterbodies (lakes, man-made waterbodies, wide rivers) from the BTM Land Use (1:250 000 scale), that have a bull trout presence.	km	3	Watershed Atlas Fish Information Summary System BTM Land Use

Density Attributes for Fish

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
salmon_p	% Blueline stream length with known salmon presence	Percentage of the blueline stream length in a watershed with known presence of Salmon. Included in the salmon category are chinook, chum, coho, pink, sockeye and kokanee salmon. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the salmon bearing stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System
salm_log_p	% Blueline stream length logged with known salmon presence	Percentage of the blueline stream length with known Salmon presence that has been logged and selectively logged to the bank. Included in the salmon category are chinook, chum, coho, pink, sockeye and kokanee salmon. This percentage uses the blueline route length and	%	1	Watershed Atlas Fish Information Summary System BTM Land Use

		includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the logged salmon bearing stream length by the salmon bearing stream length of the watershed.			
salm_for_p	% Blueline stream length with known salmon presence on forest land	Percentage of blueline stream length with known Salmon presence on forest land. Included in the salmon category are chinook, chum, coho, pink, sockeye and kokanee salmon. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the salmon bearing stream length on forest land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
sport_p	% Blueline stream length with known sport fish presence	Percentage of the blueline stream length in a watershed with known presence of Sport fish. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the sport fish bearing stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System
sprt_log_p	% Blueline stream length logged with known sport fish presence	Percentage of the blueline stream length with known Sport fish presence that has been logged and selectively logged to the bank. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the logged sport fish stream length by the sport fish stream length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
sprt_for_p	% Blueline stream length with known sport fish presence on forest land	Percentage of blueline stream length that has a known sport fish presence on forest land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any	%	1	Watershed Atlas Fish Information Summary System BTM Land Use

		lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the sport fish stream length on forest land by the blueline route length of the watershed.			
other_p	% Blueline stream length with known 'other' fish presence	Percentage of the blueline stream length in a watershed with known presence of 'Other' fish. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the 'other' fish bearing stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System
ch_p	% Blueline stream length with known chinook salmon presence	Percentage of blueline stream length that has a known chinook salmon presence. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the chinook stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System
cm_p	% Blueline stream length with known chum salmon presence	Percentage of blueline stream length that has a known chum salmon presence. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the chum stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System
co_p	% Blueline stream length with known coho salmon presence	Percentage of blueline stream length that has a known coho salmon presence. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the coho stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System
pk_p	% Blueline stream length with known pink salmon presence	Percentage of blueline stream length that has a known pink salmon presence. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the pink stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System

sk_p	% Blueline stream length with known sockeye salmon presence	Percentage of blueline stream length that has a known sockeye salmon presence. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the sockeye stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System
st_p	% Blueline stream length with known steelhead presence	Percentage of blueline stream length that has a known steelhead presence. This category of steelhead also includes resident steelhead and upstream stocked steelhead from hatcheries. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the steelhead stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System
bt_p	% Blueline stream length with known bull trout presence	Percentage of blueline stream length that has a known bull trout presence. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. This percentage is derived by dividing the bull trout stream length by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System
ch_for_p	% Blueline stream length with known chinook salmon presence on forest land	Percentage of blueline stream length that has a known chinook salmon presence on forest land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the chinook stream length on forest land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
cm_for_p	% Blueline stream length with known chum salmon presence on forest land	Percentage of blueline stream length that has a known chum salmon presence on forest land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest,	%	1	Watershed Atlas Fish Information Summary System BTM Land Use

		Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the chum stream length on forest land by the blueline route length of the watershed.			
pk_for_p	% Blueline stream length with known pink salmon presence on forest land	Percentage of blueline stream length that has a known pink salmon presence on forest land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the pink stream length on forest land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
sk_for_p	% Blueline stream length with known sockeye salmon presence on forest land	Percentage of blueline stream length that has a known sockeye salmon presence on forest land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the sockeye stream length on forest land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
co_for_p	% Blueline stream length with known coho salmon presence on forest land	Percentage of blueline stream length that has a known coho salmon presence on forest land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the coho stream length on forest land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use

st_for_p	% Blueline stream length with known steelhead presence on forest land	Percentage of blueline stream length that has a known steelhead presence on forest land. This category of steelhead also includes resident steelhead and upstream stocked steelhead from hatcheries. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the steelhead stream length on forest land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
bt_for_p	% Blueline stream length with known bull trout presence on forest land	Percentage of blueline stream length that has a known bull trout presence on forest land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the bull trout stream length on forest land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
ch_urb_p	% Blueline stream length with known chinook salmon presence on urban and agricultural/ residential land	Percentage of blueline stream length that has a known chinook salmon presence on urban and mixed agricultural and residential land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the chinook stream length on urban and mixed agricultural and residential land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
cm_urb_p	% Blueline stream length with known chum salmon presence on urban and agricultural/ residential land	Percentage of blueline stream length that has a known chum salmon presence on urban and mixed agricultural and residential land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that	%	1	Watershed Atlas Fish Information Summary System BTM Land Use

		intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the chum stream length on urban and mixed agricultural and residential land by the blueline route length of the watershed.			
co_urb_p	% Blueline stream length with known coho salmon presence on urban and agricultural/ residential land	Percentage of blueline stream length that has a known coho salmon presence on urban and mixed agricultural and residential land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the coho stream length on urban and mixed and agricultural and residential land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
pk_urb_p	% Blueline stream length with known pink salmon presence on urban and agricultural/ residential land	Percentage of blueline stream length that has a known pink salmon presence on urban and mixed agricultural and residential land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the pink stream length on urban and mixed agricultural and residential land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
sk_urb_p	% Blueline stream length with known sockeye salmon presence on urban and agricultural/ residential land	Percentage of blueline stream length that has a known sockeye salmon presence on urban and mixed agricultural and residential land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the sockeye stream length on urban and mixed agricultural and residential land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
st_urb_p	% Blueline stream length with known steelhead presence on urban and agricultural/ residential land	Percentage of blueline stream length that has a known steelhead presence on urban and mixed agricultural and residential land. This category of steelhead also includes resident steelhead and upstream stocked steelhead from	%	1	Watershed Atlas Fish Information Summary System BTM Land Use

		hatcheries. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the steelhead stream length on urban and mixed agricultural and residential land by the blueline route length of the watershed.			
bt_urb_p	% Blueline stream length with known bull trout presence on urban and agricultural/ residential land	Percentage of blueline stream length that has a known bull trout presence on urban and mixed agricultural and residential land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the bull trout stream length on urban and mixed agricultural and residential land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
sprt_urb_p	% Blueline stream length with known sport fish presence on urban and agricultural/ residential land	Percentage of blueline stream length that has a known sport fish presence on urban and mixed agricultural and residential land. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the sport fish stream length on urban and mixed agricultural and residential land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
ch_agr_p	% Blueline stream length with known chinook salmon presence on agricultural land/rangeland	Percentage of blueline stream length that has a known chinook salmon presence on agricultural land/rangeland. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the chinook stream length on agricultural land and rangeland by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use

cm_agr_p	% Blueline stream length with known chum salmon presence on agricultural land/rangeland	Percentage of blueline stream length that has a known chum salmon presence on agricultural land/rangeland. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the chum stream length on agricultural land and rangeland by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
co_agr_p	% Blueline stream length with known coho salmon presence on agricultural land/rangeland	Percentage of blueline stream length that has a known coho salmon presence on agricultural land/rangeland. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the coho stream length on agricultural land and rangeland by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
pk_agr_p	% Blueline stream length with known pink salmon presence on agricultural land/rangeland	Percentage of blueline stream length that has a known pink salmon presence on agricultural land/rangeland. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the pink stream length on agricultural land and rangeland land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
sk_agr_p	% Blueline stream length with known sockeye salmon presence on agricultural land/rangeland	Percentage of blueline stream length that has a known sockeye salmon presence on agricultural land/rangeland. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody -such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the sockeye stream length on agricultural land and rangeland land by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use

st_agr_p	% Blueline stream length with known steelhead presence on agricultural land/rangeland	Percentage of blueline stream length that has a known steelhead presence on agricultural land/rangeland. This category of steelhead also includes resident steelhead and upstream stocked steelhead from hatcheries. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody - such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the steelhead stream length on agricultural land and rangeland by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
bt_agr_p	% Blueline stream length with known bull trout presence on agricultural land/rangeland	Percentage of blueline stream length that has a known bull trout presence on agricultural land/rangeland. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody - such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the bull trout stream length on agricultural land and rangeland by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use
sprt_agr_p	% Blueline stream length with known sport fish presence on agricultural land/rangeland	Percentage of blueline stream length that has a known sport fish presence on agricultural land/rangeland. This percentage uses the blueline route length and includes the length of lakes, wetlands and man-made waterbodies. However, any lengths that intersect with a waterbody - such as a lake or wide river- in the BTM Land Use (1:250 000 scale), will be excluded. This percentage is derived by dividing the sport fish stream length on agricultural land and rangeland by the blueline route length of the watershed.	%	1	Watershed Atlas Fish Information Summary System BTM Land Use

1:20 000 Rivers

Absolute Attributes for 1:20 000 Rivers

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
stream_k	Total 3D stream length	Total 3D stream length in a watershed (from TRIM 1:20 000 scale mapping). This length does not include any waterbodies.	km	3	Watershed Atlas TRIM Roads & Streams
str_log_k	3D stream length logged	3D stream length logged and selectively logged to the bank.	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams
str_for_k	3D stream length on forest land	3D stream length on forest land. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams
str_50_k	3D stream length on a gradient >50%	3D stream length located on a gradient greater than 50%.	km	3	Watershed Atlas TRIM Roads & Streams TRIM DEM
str_60_k	3D stream length on a gradient >60%	3D stream length located on a gradient greater than 60%.	km	3	Watershed Atlas TRIM Roads & Streams TRIM DEM
str_70_k	3D stream length on a gradient >70%	3D stream length located on a gradient greater than 70%.	km	3	Watershed Atlas TRIM Roads & Streams TRIM DEM
str_l_50_k	3D stream length logged on a gradient >50%	3D stream length located on a gradient greater than 50% that is logged and selectively logged to the bank.	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_l_60_k	3D stream length logged on a gradient >60%	3D stream length located on a gradient greater than 60% that is logged and selectively logged to the bank.	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_l_70_k	3D stream length logged on a gradient >70%	3D stream length located on a gradient greater than 70% that is logged and selectively logged to the bank.	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM

			Units	Decimals	Coverages Used
str_f_50_k	3D stream length on forest land on a gradient >50%	3D stream length on forest land located on a gradient greater than 50%. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_f_60_k	3D stream length on forest land on a gradient >60%	3D stream length on forest land located on a gradient greater than 60%. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_f_70_k	3D stream length on forest land on a gradient >70%	3D stream length on forest land located on a gradient greater than 70%. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned).	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM

Density Attributes for 1:20 000 Rivers

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
stream_d	Total 3D stream length density	Total 3D stream length density in a watershed. This density is derived by dividing the total 3D stream length by the watershed land area.	km/km2	2	Watershed Atlas TRIM Roads & Streams BTM Land Use
str_log_p	% 3D stream length logged	Percentage of 3D stream length logged and selectively logged to the bank in a watershed. Derived by dividing the 3D stream length logged by the total 3D stream length of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
str_for_p	% 3D stream length on forest land	Percentage of 3D stream length on forest land. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the 3D stream length on forest land by the total 3D stream length of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
str_50_p	% 3D stream length on a gradient >50%	Percentage of 3D stream length located on a gradient greater than 50%. This percentage is derived by dividing the 3D stream length on a gradient greater than 50% by	%	1	Watershed Atlas TRIM Roads & Streams TRIM DEM

		the total 3D stream length of the watershed.			
str_60_p	% 3D stream length on a gradient >60%	Percentage of 3D stream length located on a gradient greater than 60%. This percentage is derived by dividing the 3D stream length on a gradient greater than 60% by the total 3D stream length of the watershed.	%	1	Watershed Atlas TRIM Roads & Streams TRIM DEM
str_70_p	% 3D stream length on a gradient >70%	Percentage of 3D stream length located on a gradient greater than 70%. This percentage is derived by dividing the 3D stream length on a gradient greater than 70% by the total 3D stream length of the watershed.	%	1	Watershed Atlas TRIM Roads & Streams TRIM DEM
str_l_50_p	% 3D stream length logged on a gradient >50%	Percentage of 3D stream length located on a gradient greater than 50% that is logged and selectively logged to the bank. This percentage is derived by dividing the 3D stream length logged on a gradient greater than 50% by the 3D stream length on a gradient of greater than 50%.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_l_60_p	% 3D stream length logged on a gradient >60%	Percentage of 3D stream length located on a gradient greater than 60% that is logged and selectively logged to the bank. This percentage is derived by dividing the 3D stream length logged on a gradient greater than 60% by the 3D stream length on a gradient of greater than 60%.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_l_70_p	% 3D stream length logged on a gradient >70%	Percentage of 3D stream length located on a gradient greater than 70% that is logged and selectively logged to the bank. This percentage is derived by dividing the 3D stream length logged on a gradient greater than 70% by the 3D stream length on a gradient greater than 70%.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_f_50_p	% 3D stream length on forest land on a gradient >50%	Percentage of 3D stream length on forest land located on a gradient greater than 50%. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the forest land 3D stream length on a gradient greater than 50% by the forest land 3D stream length of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM
str_f_60_p	% 3D stream length on forest land on a gradient >60%	Percentage of 3D stream length on forest land located on a gradient greater than 60%. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the forest land 3D stream length on a gradient greater than 60% by	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM

		the forest land 3D stream length of the watershed.			
str_f_70_p	% 3D stream length on forest land on a gradient >70%	Percentage of 3D stream length on forest land located on a gradient greater than 70%. Forest land is comprised of 5 BTM Land Use classes (Old Forest, Young Forest, Recently Logged, Selectively Logged, and Recently Burned). This percentage is derived by dividing the forest land 3D stream length on a gradient greater than 70% by the forest land 3D stream length of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams TRIM DEM

Riparian

Absolute Attributes for Riparian

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
str100_ha	Land area within 100 m of stream	Land area within 100 metres of each stream.	ha	0	Watershed Atlas TRIM Roads & Streams BTM Land Use
str30_ha	Land area within 30 m of stream	Land area within 30 metres of each stream.	ha	0	Watershed Atlas TRIM Roads & Streams BTM Land Use
road_b_k	3D road length within 100 m of stream	3D road length within 100 metres of each stream.	km	3	Watershed Atlas TRIM Roads & Streams
road_fb_k	3D road length on forest land within 100 m of stream	3D road length on forest land within 100 metres of each stream.	km	3	Watershed Atlas BTM Land Use TRIM Roads & Streams
urb_s_ha	Urban area within 30 m of stream	Urban land area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
agmx_s_ha	Agricultural/Residential	Mixed Agricultural and Residential land area within 30	ha	0	Watershed Atlas

	area within 30 m of stream	metres of a stream.			BTM Land Use TRIM Roads & Streams
agr_s_ha	Agricultural area within 30 m of stream	Agricultural land area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
rang_s_ha	Rangeland area within 30 m of stream	Rangeland area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
fo_s_ha	Old Forest area within 30 m of stream	Old Forest (>140 yrs) land area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
fy_s_ha	Young Forest area within 30 m of stream	Young Forest (<140 yrs) land area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
log_s_ha	Recently Logged area within 30 m of stream	Recently Logged area within 30 metres of a stream. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
logs_s_ha	Selectively Logged area within 30 m of stream	Selectively Logged area within 30 metres of a stream. Selectively logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
burn_s_ha	Recently Burned area within 30 m of stream	Recently Burned area within 30 metres of a stream. Recently burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
forl_s_ha	Forest land area within 30 m of stream	Forest land area within 30 metres of a stream. Includes Old Forest (>140 yrs); Young Forest (<140 yrs) ; Recently Logged; Selectively Logged and Recently Burned.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
wet_s_ha	Wetland area within 30 m of stream	Wetland area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
shrb_s_ha	Shrub Growth area within 30 m of stream	Shrub Growth area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
bare_s_ha	Barren Surface area within	Barren Surface area within 30 metres of a stream.	ha	0	Watershed Atlas

	30 m of stream				BTM Land Use TRIM Roads & Streams
ava_s_ha	Avalanche Chute area within 30 m of stream	Avalanche Chute area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
alp_s_ha	Alpine area within 30 m of stream	Alpine land area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
ice_s_ha	Glacier and Snow Covered area within 30 m of stream	Glacier and Snow Covered land area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
est_s_ha	Estuaries area within 30 m of stream	Estuaries area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
rec_s_ha	Recreational area within 30 m of stream	Recreational land area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams
mine_s_ha	Mining area within 30 m of stream	Mining area within 30 metres of a stream.	ha	0	Watershed Atlas BTM Land Use TRIM Roads & Streams

Density Attributes for Riparian

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
str100_p	% Land area within 100 m of stream	Percentage of land area within 100 metres of each stream. Derived by dividing the land area within 100 metres of each stream by the land area of the watershed.	%	1	Watershed Atlas TRIM Roads & Streams BTM Land Use
str30_p	% Land area within 30 m of stream	Percentage of land area within 30 metres of each stream. Derived by dividing the land area within 30 metres of each stream by the land area of the watershed.	%	1	Watershed Atlas TRIM Roads & Streams BTM Land Use

road_b_d	3D road length density within 100 m of stream	3D road length density within 100 metres of each stream. Derived by dividing the 3D road length within 100 metres of each stream by the land area of the watershed.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams
road_fb_d	3D road length density on forest land within 100 m of stream	3D road length density on forest land within 100 metres of each stream. Derived by dividing the forest land 3D road length within 100 metres of each stream by the watershed forest land area.	km/km2	2	Watershed Atlas BTM Land Use TRIM Roads & Streams
urb_s_p	% Urban area within 30 m of stream	Percentage of Urban land area within 30 metres of a stream. This percentage is derived by dividing the urban area within 30 metres of a stream by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
agmx_s_p	% Agricultural/Residential area within 30 m of stream	Percentage of Mixed Agricultural and Residential land area within 30 metres of a stream. This percentage is derived by dividing the mixed agricultural and residential area within 30 metres of a stream by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
agr_s_p	% Agricultural area within 30 m of stream	Percentage of Agricultural land area within 30 metres of a stream. This percentage is derived by dividing the agricultural area within 30 metres of a stream by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
rang_s_p	% Rangeland area within 30 m of stream	Percentage of Rangeland area within 30 metres of a stream. This percentage is derived by dividing the rangeland area within 30 metres of a stream by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
fo_s_p	% Old Forest area within 30 m of stream	Percentage of Old Forest (>140yrs) land area within 30 metres of a stream. This percentage is derived by dividing the old forest area within 30 metres of a stream by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
fy_s_p	% Young Forest area within 30 m of stream	Percentage of Young Forest (<140yrs) land area within 30 metres of a stream. This percentage is derived by dividing the young forest area within 30 metres of a stream by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
log_s_p	% Recently Logged area within 30 m of stream	Percentage of Recently Logged area within 30 metres of a stream. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams

		recently logged area within 30 metres if a stream by the land area of the watershed.			
logs_s_p	% Selectively Logged area within 30 m of stream	Percentage of Selectively Logged area within 30 metres of a stream. Selectively logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the selectively logged area within 30 metres of a stream by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
burn_s_p	% Recently Burned area within 30 m of stream	Percentage of Recently Burned area within 30 metres of a stream. Recently logged is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently burned area within 30 metres of a stream by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
forl_s_p	% Total Forest Land area within 30 m of stream	Percentage of Total Forest Land area within 30 metres of a stream. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned. This percentage is derived by dividing the forest land area within 30 metres of a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
wet_s_p	% Wetland area within 30 m of stream	Percentage of Wetland area within 30 metres of a stream. This percentage is derived by dividing the wetland area within 30 metres of a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
shrb_s_p	% Shrub Growth area within 30 m of stream	Percentage of Shrub Growth area within 30 metres of a stream. This percentage is derived by dividing the shrub growth area within 30 metres of a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
bare_s_p	% Barren Surface area within 30 m of stream	Percentage of Barren Surface area within 30 metres of a stream. This percentage is derived by dividing the barren surface area within 30 metres of a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
ava_s_p	% Avalanche Chute area within 30 m of stream	Percentage of Avalanche Chute area within 30 metres of a stream. This percentage is derived by dividing the avalanche chute area within 30 metres of a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams

alp_s_p	% Alpine area within 30 m of stream	Percentage of Alpine land area within 30 metres of a stream. This percentage is derived by dividing the alpine area within 30 metres of a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
ice_s_p	% Glacier and Snow Covered area within 30 m of stream	Percentage of Glacier and Snow Covered land area within 30 metres of a stream. This percentage is derived by dividing the glacier and snow covered area within 30 metres of a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
est_s_p	% Estuaries area within 30 m of stream	Percentage of Estuaries area within 30 metres of a stream. This percentage is derived by dividing the estuaries area within 30 metres of a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
rec_s_p	% Recreational area within 30 m of stream	Percentage of Recreational land area within 30 metres of a stream. This percentage is derived by dividing the recreational area within 30 metres of a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams
mine_s_p	% Mining area within 30 metres of stream	Percentage of Mining area within 30 metres of a stream. This percentage is derived by dividing the mining area within 30 metres within a stream by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM Roads & Streams

Forest Land Use

Absolute Attributes for Forest Land Use

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
logged_ha	Total logged area	Total land area logged and selectively logged in approximately the last 20 years in a watershed.	ha	0	Watershed Atlas BTM Land Use
log_lo_ha	Logged area at <300 m	Area logged and selectively logged in approximately the	ha	0	Watershed Atlas

	elevation	last 20 years under 300 metres elevation.			BTM Land Use TRIM DEM
log_m_ha	Logged area at 300-800 m elevation	Area logged and selectively logged in approximately the last 20 years between 300 and 800 metres elevation.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
log_hi_ha	Logged area at >800 m elevation	Area logged and selectively logged in approximately the last 20 years over 800 metres elevation.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
log_50_ha	Logged area on a gradient >50%	Area logged and selectively logged in approximately the last 20 years on a gradient greater than 50%.	ha	0	Watershed Atlas TRIM DEM BTM Land Use
log_60_ha	Logged area on a gradient >60%	Area logged and selectively logged in approximately the last 20 years on a gradient greater than 60%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
log_70_ha	Logged area on a gradient >70%	Area logged and selectively logged in approximately the last 20 years on a gradient greater than 70%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
fo_ha	Old Forest area	Old Forest (>140 yrs) land area of the watershed.	ha	0	Watershed Atlas BTM Land Use
fo_0_8	Old Forest area on a gradient 0-8%	Old Forest (>140 yrs) land area located on a gradient between 0 and 8%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
fo_8_30	Old Forest area on a gradient 8-30%	Old Forest (>140 yrs) land area located on a gradient between 8 and 30%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
fo_30_60	Old Forest area on a gradient 30-60%	Old Forest (>140 yrs) land area located on a gradient between 30 and 60%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
fo_60_up	Old Forest area on a gradient >60%	Old Forest (>140 yrs) land area located on a gradient greater than 60%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
fy_ha	Young Forest area	Young Forest (<140 yrs) land area of the watershed.	ha	0	Watershed Atlas BTM Land Use

fy_0_8	Young Forest area on a gradient 0-8%	Young Forest (<140 yrs) land area located on a gradient between 0 and 8%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
fy_8_30	Young Forest area on a gradient 8-30%	Young Forest (<140 yrs) land area located on a gradient between 8 and 30%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
fy_30_60	Young Forest area on a gradient 30-60%	Young Forest (<140 yrs) land area located on a gradient between 30 and 60%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
fy_60_up	Young Forest area on a gradient >60%	Young Forest (<140 yrs) land area located on a gradient greater than 60%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
log_ha	Recently Logged area	Recently Logged area of the watershed. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use
log_0_8	Recently Logged area on a gradient 0-8%	Recently Logged area located on a gradient between 0 and 8%. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
log_8_30	Recently Logged area on a gradient 8-30%	Recently Logged area located on a gradient between 8 and 30%. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
log_30_60	Recently Logged area on a gradient 30-60%	Recently Logged area located on a gradient between 30 and 60%. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
log_60_up	Recently Logged area on a gradient >60%	Recently Logged area located on a gradient greater than 60%. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
logs_ha	Selectively Logged area	Selectively Logged area of the watershed. Selective logging is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use

logs_0_8	Selectively Logged area on a gradient 0-8%	Selectively Logged area located on a gradient between 0 and 8%. Selective logging is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
logs_8_30	Selectively Logged area on a gradient 8-30%	Selectively Logged area located on a gradient between 8 and 30%. Selective logging is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
logs_30_60	Selectively Logged area on a gradient 30-60%	Selectively Logged area located on a gradient between 30 and 60%. Selective logging is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
logs_60_up	Selectively Logged area on a gradient >60%	Selectively Logged area located on a gradient greater than 60%. Selective logging is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
burn_ha	Recently Burned area	Recently Burned area of the watershed. Recently burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use
burn_0_8	Recently Burned area on a gradient 0-8%	Recently Burned area located on a gradient between 0 and 8%. Recently burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
burn_8_30	Recently Burned area on a gradient 8-30%	Recently Burned area located on a gradient between 8 and 30%. Recently burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
burn_30_60	Recently Burned area on a gradient 30-60%	Recently Burned area located on a gradient between 30 and 60%. Recently burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
burn_60_up	Recently Burned area on a gradient >60%	Recently Burned area located on a gradient greater than 60%. Recently burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage.	ha	0	Watershed Atlas BTM Land Use TRIM DEM

forl_ha	Total forest land area	Total forest land area of the watershed. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned.	ha	0	Watershed Atlas BTM Land Use
forl_0_8	Total forest land area on a gradient 0-8%	Total forest land area located on a gradient between 0 and 8%. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
forl_8_30	Total forest land area on a gradient 8-30%	Total forest land area located on a gradient between 8 and 30%. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
forl_30_60	Total forest land area on a gradient 30-60%	Total forest land area located on a gradient between 30 and 60%. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
forl_60_up	Total forest land area on a gradient >60%	Total forest land area located on a gradient greater than 60%. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned.	ha	0	Watershed Atlas BTM Land Use TRIM DEM

Density Attributes for Forest Land Use

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
logged_p	% Total logged area	Percentage of watershed land area logged or selectively logged in approximately the last 20 years. This percentage is derived by dividing the total logged area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
log_lo_p	% Logged area at <300 m elevation	Percentage of land area logged and selectively logged in approximately the last 20 years under 300 metres elevation. This percentage is derived by dividing the logged area under 300 metres elevation by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM

log_m_p	% Logged area at 300-800 m elevation	Percentage of land area logged and selectively logged in approximately the last 20 years between 300 and 800 metres elevation. This percentage is derived by dividing the logged area between 300 and 800 metres elevation by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
log_hi_p	% Logged area at >800 m elevation	Percentage of land area logged and selectively logged in approximately the last 20 years over 800 metres elevation. This percentage is derived by dividing the logged area over 800 metres elevation by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
log_50_p	% Logged area on a gradient >50%	Percentage of logged and selectively logged area on a gradient greater than 50%. This percentage is derived by dividing the logged area on a gradient greater than 50% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
log_60_p	% Logged area on a gradient >60%	Percentage of logged and selectively logged area on a gradient greater than 60%. This percentage is derived by dividing the logged area on a gradient greater than 60% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
log_70_p	% Logged area on a gradient >70%	Percentage of logged and selectively logged area on a gradient greater than 70%. This percentage is derived by dividing the logged area on a gradient greater than 70% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
fo_p	% Old Forest area	Percentage of Old Forest (>140 yrs) land area of the watershed. This percentage is derived by dividing the old forest area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
fo_0_8_p	% Old Forest area on a gradient 0-8%	Percentage of Old Forest (>140 yrs) land area located on a gradient between 0 and 8%. This percentage is derived by dividing the old forest area on a gradient between 0 and 8% by the total old forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
fo_8_30_p	% Old Forest area on a gradient 8-30%	Percentage of Old Forest (>140 yrs) land area located on a gradient between 8 and 30%. This percentage is derived by dividing the old forest area on a gradient between 8 and 30% by the total old forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
fo_30_60_p	% Old Forest area on a	Percentage of Old Forest (>140 yrs) land area located on	%	1	Watershed Atlas

	gradient 30-60%	a gradient between 30 and 60%. This percentage is derived by dividing the old forest area on a gradient between 30 and 60% by the total old forest land area of the watershed.			BTM Land Use TRIM DEM
fo_60_up_p	% Old Forest area on a gradient >60%	Percentage of Old Forest (>140 yrs) land area located on a gradient greater than 60%. This percentage is derived by dividing the old forest area on a gradient greater than 60% by the total old forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
fy_p	% Young Forest area	Percentage of Young Forest (<140 yrs) land area of a watershed. This percentage is derived by dividing the young forest area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
fy_0_8_p	% Young Forest area on a gradient 0-8%	Percentage of Young Forest (<140 yrs) land area located on a gradient between 0 and 8%. This percentage is derived by dividing the young forest area on a gradient between 0 and 8% by the total young forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
fy_8_30_p	% Young Forest area on a gradient 8-30%	Percentage of Young Forest (<140 yrs) land area located on a gradient between 8 and 30%. This percentage is derived by dividing the young forest area on a gradient between 8 and 30% by the total young forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
fy_30_60_p	% Young Forest area on a gradient 30-60%	Percentage of Young Forest (<140 yrs) land area located on a gradient between 30 and 60%. This percentage is derived by dividing the young forest area on a gradient between 30 and 60% by the total young forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
fy_60_up_p	% Young Forest area on a gradient >60%	Percentage of Young Forest (<140 yrs) land area located on a gradient greater than 60%. This percentage is derived by dividing the young forest area on a gradient greater than 60% by the total young forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
log_p	% Recently Logged area	Percentage of Recently Logged area of the watershed. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently logged area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use

log_0_8p	% Recently Logged area on a gradient 0-8%	Percentage of Recently Logged area located on a gradient between 0 and 8%. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently logged area on a gradient between 0 and 8% by the total recently logged area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
log_8_30p	% Recently Logged area on a gradient 8-30%	Percentage of Recently Logged area located on a gradient between 8 and 30%. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently logged area on a gradient between 8 and 30% by the total recently logged area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
log_30_60p	% Recently Logged area on a gradient 30-60%	Percentage of Recently Logged area located on a gradient between 30 and 60%. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently logged area on a gradient between 30 and 60% by the total recently logged area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
log_60_upp	% Recently Logged area on a gradient >60%	Percentage of Recently Logged area located on a gradient greater than 60%. Recently logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently logged area on a gradient greater than 60% by the total recently logged area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
logs_p	% Selectively Logged area	Percentage of Selectively Logged area of the watershed. Selectively logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the selectively logged area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
logs0_8p	% Selectively Logged area on a gradient 0-8%	Percentage of Selectively Logged area located on a gradient between 0 and 8%. Selectively logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the selectively logged area on a gradient between 0 and 8% by the total selectively logged area of	%	1	Watershed Atlas BTM Land Use TRIM DEM

		the watershed.			
logs8_30p	% Selectively Logged area on a gradient 8-30%	Percentage of Selectively Logged area located on a gradient between 8 and 30%. Selectively logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the selectively logged area on a gradient between 8 and 30% by the total selectively logged area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
logs30_60p	% Selectively Logged area on a gradient 30-60%	Percentage of Selectively Logged area located on a gradient between 30 and 60%. Selectively logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the selectively logged area on a gradient between 30 and 60% by the total selectively logged area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
logs60_upp	% Selectively Logged area on a gradient >60%	Percentage of Selectively Logged area located on a gradient greater than 60%. Selectively logged is defined as logging in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the selectively logged area on a gradient greater than 60% by the total selectively logged area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
burn_p	% Recently Burned area	Percentage of Recently Burned area of the watershed. Recently burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently burned area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
burn0_8p	% Recently Burned area on a gradient 0-8%	Percentage of Recently Burned area located on a gradient between 0 and 8%. Recently Burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently burned area on a gradient between 0 and 8% by the total recently burned area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
burn8_30p	% Recently Burned area on a gradients 8-30%	Percentage of Recently Burned area located on a gradient between 8 and 30%. Recently Burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently burned area on a gradient between 8 and	%	1	Watershed Atlas BTM Land Use TRIM DEM

		30% by the total recently burned area of the watershed.			
burn30_60p	% Recently Burned area on a gradient 30-60%	Percentage of Recently Burned area located on a gradient between 30 and 60%. Recently Burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently burned area on a gradient between 30 and 60% by the total recently burned area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
burn60_upp	% Recently Burned area on a gradient >60%	Percentage of Recently Burned area located on a gradient greater than 60%. Recently Burned is defined as burns in approximately the last 20 years previous to the BTM Land Use Vintage. This percentage is derived by dividing the recently burned area on a gradient greater than 60% by the total recently burned area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
forl_p	% Total forest land area	Percentage of Total forest land area of the watershed. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned. This percentage is derived by dividing the total forest land area by the total land area of the watershed.	%	1	Watershed Atlas BTM Land Use
forl0_8p	% Total forest land area on a gradient 0-8%	Percentage of Total forest land area located on a gradient between 0 and 8%. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned. This percentage is derived by dividing the total forest land area on a gradient between 0 and 8% by the total forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
forl8_30p	% Total forest land area on a gradient 8-30%	Percentage of Total forest land area located on a gradient between 8 and 30%. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned. This percentage is derived by dividing the total forest land area on a gradient between 8 and 30% by the total forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
forl30_60p	% Total forest land area on a gradient 30-60%	Percentage of Total forest land area located on a gradient between 30 and 60%. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned. This percentage is derived by dividing the total forest land area on a gradient	%	1	Watershed Atlas BTM Land Use TRIM DEM

		between 30 and 60% by the total forest land area of the watershed.			
forl60_upp	% Total forest land area on a gradient >60%	Percentage of Total forest land area located on a gradient greater than 60%. Includes Old Forest (>140 yrs); Young Forest (<140 yrs); Recently Logged; Selectively Logged and Recently Burned. This percentage is derived by dividing the total forest land area on a gradient greater than 60% by the total forest land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM

Non-Forest Land Use

Absolute Attributes for Non-Forest Land Use

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
comm_ws_ha	Community Watershed area	Community Watershed area in the watershed.	ha	0	Watershed Atlas MELP's ftp site: Community Watersheds
crown_ha	Crown area	Crown area of the watershed.	ha	0	Watershed Atlas CDMS
private_ha	Private area	Private area of the watershed.	ha	0	Watershed Atlas CDMS
urb_ha	Urban area	Urban land area of the watershed.	ha	0	Watershed Atlas BTM Land Use
agmx_ha	Agricultural/Residential area	Mixed Agricultural and Residential land area of the watershed.	ha	0	Watershed Atlas BTM Land Use
agra_ha	Agricultural area	Agricultural land area of the watershed.	ha	0	Watershed Atlas BTM Land Use
rang_ha	Rangeland area	Rangeland area of the watershed.	ha	0	Watershed Atlas

					BTM Land Use
wet_ha	Wetland area	Wetland area of the watershed.	ha	0	Watershed Atlas BTM Land Use
shrb_ha	Shrub Growth area	Shrub Growth area of the watershed.	ha	0	Watershed Atlas BTM Land Use
bare_ha	Barren Surface area	Barren Surface area of the watershed.	ha	0	Watershed Atlas BTM Land Use
ava_ha	Avalanche Chute area	Avalanche Chute area of the watershed.	ha	0	Watershed Atlas BTM Land Use
alp_ha	Alpine area	Alpine land area of the watershed.	ha	0	Watershed Atlas BTM Land Use
ice_ha	Glacier and Snow Covered area	Glacier and Snow Covered land area of the watershed	ha	0	Watershed Atlas BTM Land Use
est_ha	Estuaries area	Estuaries area of the watershed.	ha	0	Watershed Atlas BTM Land Use
wfre_ha	Fresh Water area	Fresh Water area of the watershed. Fresh water includes waterbodies greater than >25 hectares.	ha	0	Watershed Atlas BTM Land Use
wsal_ha	Salt Water area	Salt Water area of the watershed.	ha	0	Watershed Atlas BTM Land Use
rec_ha	Recreational area	Recreational land area of the watershed.	ha	0	Watershed Atlas BTM Land Use
mine_ha	Mining area	Mining area of the watershed.	ha	0	Watershed Atlas BTM Land Use
mine_count	# Mines	Number of mines over 10 000 tons per annum production in a watershed.	integer	0	Watershed Atlas MinFile

Density Attributes for Non-Forest Land Use

Attribute	**Attribute Name**	**Description**	**Units**	**Decimals**	**Coverages Used**

Label					
comm_ws_p	% Community Watershed area	Percentage of the total watershed area that is in a Community Watershed. This area includes surface water. This percentage is derived by dividing the Community Watershed area in the watershed by the total area of the watershed.	%	1	Watershed Atlas MELP's ftp site: Community Watersheds
crown_p	% Crown land area	Percentage of Crown area in the watershed. This percentage is derived by dividing the crown area by the total area of the watershed.	%	1	Watershed Atlas CDMS BTM Land Use
private_p	% Private land area	Percentage of Private area in the watershed. This percentage is derived by dividing the private area by the total area of the watershed.	%	1	Watershed Atlas CDMS BTM Land Use
urb_p	% Urban area	Percentage of Urban land area of the watershed. This percentage is derived by dividing the urban land area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
agmx_p	% Agricultural/ Residential area	Percentage of Mixed Agricultural and Residential land area of the watershed. This percentage is derived by dividing the mixed agricultural and residential land area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
agra_p	% Agricultural area	Percentage of Agricultural land area of the watershed. This percentage is derived by dividing the agricultural land area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
rang_p	% Rangeland area	Percentage of Rangeland area of the watershed. This percentage is derived by dividing the rangeland area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
wet_p	% Wetland area	Percentage of Wetland area of the watershed. This percentage is derived by dividing the wetland area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
shrb_p	% Shrub Growth area	Percentage of Shrub Growth area of the watershed. This percentage is derived by dividing the shrub growth area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
bare_p	% Barren Surface area	Percentage of Barren Surface area of the watershed. This percentage is derived by dividing the barren surface area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use

ava_p	% Avalanche Chute area	Percentage of Avalanche Chute area of the watershed. This percentage is derived by dividing the avalanche chute area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
alp_p	% Alpine area	Percentage of Alpine land area of the watershed. This percentage is derived by dividing the alpine area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
ice_p	% Glacier and Snow Covered area	Percentage of Glacier and Snow Covered land area of the watershed. This percentage is derived by dividing the glacier and snow covered area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
est_p	% Estuaries area	Percentage of Estuaries area of the watershed. This percentage is derived by dividing the estuaries area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
wfre_p	% Fresh Water area	Percentage of Fresh Water area of the total watershed. Fresh water includes waterbodies greater than >25 hectares. This percentage is derived by dividing the fresh water area by the total area of the watershed.	%	1	Watershed Atlas BTM Land Use
wsal_p	% Salt Water area	Percentage of Salt Water area of the watershed. This percentage is derived by dividing the salt water area by the total area of the watershed.	%	1	Watershed Atlas BTM Land Use
rec_p	% Recreational area	Percentage of Recreational land area of the watershed. This percentage is derived by dividing the recreational area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use
mine_p	% Mining area	Percentage of Mining area of the watershed. This percentage is derived by dividing the mining area by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use

Ecology

Absolute Attributes for Ecology

Attribute	Attribute Name	Description	Units	Decimals	Coverages Used

Label					
ecosectn	Ecosection name	Primary ecosection name. Primary is defined as the ecosection occupying the majority of the watershed area.	character		Watershed Atlas MELP's Wildlife ftp site: BC Environment Ecoregion Ecosystem Classification Units
ecosect_ha	Ecosection area	Area of the ecosection which is occupying the watershed. This area is not the total area of the ecosection.	ha	0	Watershed Atlas MELP's Wildlife ftp site: BC Environment Ecoregion Ecosystem Classification Units
bec_name	Biogeoclimatic zone name	Primary biogeoclimatic zone name. Primary is defined as the biogeoclimatic zone occupying the majority of the watershed area.	character		Watershed Atlas Biogeoclimatic Zones
cdf_ha	Coastal Douglas-Fir zone area	Coastal Douglas-Fir zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
cwh_ha	Coastal Western Hemlock zone area	Coastal Western Hemlock zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
mh_ha	Mountain Hemlock zone area	Mountain Hemlock zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
bg_ha	Bunch Grass zone area	Bunch Grass zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
pp_ha	Ponderosa Pine zone area	Ponderosa Pine zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
idf_ha	Interior Douglas-Fir zone area	Interior Douglas-Fir zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
ich_ha	Interior Cedar-Hemlock zone area	Interior Cedar-Hemlock zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
ms_ha	Montane Spruce zone area	Montane Spruce zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
essf_ha	Engelmann Spruce - Subalpine Fir zone area	Engelmann Spruce - Subalpine Fir zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones

sbs_ha	Sub-Boreal Spruce zone area	Sub-Boreal Spruce zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
sbps_ha	Sub-Boreal Pine Spruce zone area	Sub-Boreal Pine Spruce zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
bbws_ha	Boreal Black and White Spruce zone area	Boreal Black and White Spruce zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
swb_ha	Sub-Boreal White Birch zone area	Sub-Boreal White Birch zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones
at_ha	Alpine Tundra zone area	Alpine Tundra zone area of the watershed.	ha	0	Watershed Atlas Biogeoclimatic Zones

Density Attributes for Ecology

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
ecosectn_p	% Ecosection	Percentage of the ecosection which occupies the majority of the watershed. This percentage is derived by dividing the ecosection area by the total area of the watershed.	%	1	Watershed Atlas MELP's Wildlife ftp site: BC Environment Ecoregion Ecosystem Classification Units
cdf_p	% Coastal Douglas-Fir zone area	Coastal Douglas-Fir zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
cwh_p	% Coastal Western Hemlock zone area	Coastal Western Hemlock zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
mh_p	% Mountain Hemlock zone area	Mountain Hemlock zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
bg_p	% Bunch Grass zone area	Bunch Grass zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
pp_p	% Ponderosa Pine zone area	Ponderosa Pine zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones

idf_p	% Interior Douglas-Fir zone area	Interior Douglas-Fir zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
ich_p	% Interior Cedar-Hemlock zone area	Interior Cedar-Hemlock zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
ms_p	% Montane Spruce zone area	Montane Spruce zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
essf_p	% Engelmann Spruce - Subalpine Fir zone area	Engelmann Spruce - Subalpine Fir zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
sbs_p	% Sub-Boreal Spruce zone area	Sub-Boreal Spruce zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
sbps_p	% Sub-Boreal Pine Spruce zone area	Sub-Boreal Pine Spruce zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
bbws_p	% Boreal Black and White Spruce zone area	Boreal Black and White Spruce zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
swb_p	% Sub-Boreal White Birch zone area	Sub-Boreal White Birch zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones
at_p	% Alpine Tundra zone area	Alpine Tundra zone area as a percentage of the total watershed area.	%	1	Watershed Atlas Biogeoclimatic Zones

Terrain

Absolute Attributes for Terrain

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
perimeter	Watershed perimeter	Perimeter of the watershed.	m	0	Watershed Atlas
area_ha	Total watershed area	Total watershed area including the area of waterbodies.	ha	0	Watershed Atlas

land_area	Land area	Land area is the watershed's total area without the area covered by surface water. Surface water includes salt water (WSAL) and fresh water (WFRE) as defined by the BTM Land Use classification; which includes lakes, water bodies or reservoirs >25 hectares. This value is derived by subtracting the amount of surface salt water area and the amount of surface fresh water area from the total watershed area. This variable is used to calculate most (but not all) densities and percentages.	ha	0	Watershed Atlas BTM Land Use
land_lo	Land area at <300 m elevation	Land area below 300 metres elevation.	ha	0	Watershed Atlas TRIM DEM BTM Land Use
land_m	Land area at 300-800 m elevation	Land area between 300 and 800 metres elevation.	ha	0	Watershed Atlas TRIM DEM BTM Land Use
land_hi	Land area at >800 m elevation	Land area above 800 metres elevation.	ha	0	Watershed Atlas TRIM DEM BTM Land Use
ele_min	Lowest elevation point	Lowest elevation point in a watershed.	m	0	Watershed Atlas TRIM DEM
ele_max	Highest elevation point	Highest elevation point in a watershed.	m	0	Watershed Atlas TRIM DEM
ele_mean	Mean elevation point	Mean elevation point in a watershed.	m	0	Watershed Atlas TRIM DEM
ele_sd	Standard deviation for mean elevation point	Standard deviation for the mean elevation point in a watershed.	m	0	Watershed Atlas TRIM DEM
gr_0_2	Land area with gradient 0-2%	Land area in a watershed that is located on a gradient between 0 and 2%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
gr_3_8	Land area with gradient 3-8%	Land area in a watershed that is located on a gradient between 3 and 8%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
gr_9_15	Land area with gradient 9-15%	Land area in a watershed that is located on a gradient between 9 and 15%.	ha	0	Watershed Atlas BTM Land Use

					TRIM DEM
gr_16_30	Land area with gradient 16-30%	Land area in a watershed that is located on a gradient between 16 and 30%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
gr_31_50	Land area with gradient 31-50%	Land area in a watershed that is located on a gradient between 31 and 50%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
gr_51_60	Land area with gradient 51-60%	Land area in a watershed that is located on a slope between 51 and 60%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
gr_61_70	Land area with gradient 61-70%	Land area in a watershed that is located on a gradient between 61 and 70%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
gr_71_up	Land area with gradient >70%	Land area in a watershed that is located on a gradient greater than 70%.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
north	Northern aspect area	Northern aspect land area on a gradient greater than 2% with an azimuth between 337.6 and 22.5 degrees.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
noreast	Northeastern aspect area	Northeastern aspect land area on a gradient greater than 2% with an azimuth between 22.6 and 67.5 degrees.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
east	Eastern aspect area	Eastern aspect land area on a gradient greater than 2% with an azimuth between 67.6 and 112.5 degrees.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
soueast	Southeastern aspect area	Southeastern aspect land area on a gradient greater than 2% with an azimuth between 112.6 and 157.5 degrees.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
south	Southern aspect area	Southern aspect land area on a gradient greater than 2% with an azimuth between157.6 and 202.5 degrees.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
souwest	Southwestern aspect area	Southwestern aspect land area on a gradient greater than 2% with an azimuth between 202.6 and 247.5 degrees.	ha	0	Watershed Atlas BTM Land Use

					TRIM DEM
west	Western aspect area	Western aspect land area on a gradient greater than 2% with an azimuth between 247.6 and 292.5 degrees.	ha	0	Watershed Atlas BTM Land Use TRIM DEM
norwest	Northwestern aspect area	Northwestern aspect land area on a gradient greater than 2% with an azimuth between 292.6 and 337.5 degrees.	ha	0	Watershed Atlas BTM Land Use TRIM DEM

Density Attributes for Terrain

Attribute Label	Attribute Name	Description	Units	Decimals	Coverages Used
land_p	% Land area	Percentage of land area is the watershed's total area without the area covered by surface water. Surface water includes salt water (WSAL) and fresh water (WFRE) as defined by the BTM Land Use classification; which includes lakes; water bodies or reservoirs >25 hectares. This value is derived by subtracting the amount of surface salt water area and the amount of surface fresh water area from the total watershed area. This variable is used to calculate most (but not all) densities and percentages. This percentage is derived by dividing the land area of the watershed by the total area of the watershed.	%	1	Watershed Atlas BTM Land Use
land_lo_p	% Land area at <300 m elevation	Percentage of land area below 300 metres elevation. Derived by dividing the land area below 300 metres elevation by the watershed land area.	%	1	Watershed Atlas TRIM DEM BTM Land Use
land_m_p	% Land area at 300-800 m elevation	Percentage of land area between 300 and 800 metres elevation. Derived by dividing the land area between 300 and 800 metres elevation by the watershed land area.	%	1	Watershed Atlas TRIM DEM BTM Land Use
land_hi_p	% Land area at >800 m elevation	Percentage of land area above 800 metres elevation. Derived by dividing the land area above 800 metres elevation by the watershed land area.	%	1	Watershed Atlas TRIM DEM BTM Land Use

gr_0_2_p	% Land area with gradient 0-2%	Percentage of land area in a watershed that is located on a gradient between 0 and 2%. This percentage is derived by dividing the land area on a gradient between 0 and 2% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
gr_3_8_p	% Land area with gradient 3-8%	Percentage of land area in a watershed that is located on a gradient between 3 and 8%. This percentage is derived by dividing the land area on a gradient between 3 and 8% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
gr_9_15_p	% Land area with gradient 9-15%	Percentage of land area in a watershed that is located on a gradient between 9 and 15%. This percentage is derived by dividing the land area on a gradient between 9 and 15% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
gr_16_30_p	% Land area with gradient 16-30%	Percentage of land area in a watershed that is located on a gradient between 16 and 30%. This percentage is derived by dividing the land area on a gradient between 16 and 30% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
gr_31_50_p	% Land area with gradient 31-50%	Percentage of land area in a watershed that is located on a gradient between 31 and 50%. This percentage is derived by dividing the land area on a gradient between 31 and 50% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
gr_51_60_p	% Land area with gradient 51-60%	Percentage of land area in a watershed that is located on a gradient between 51 and 60%. This percentage is derived by dividing the land area on a gradient between 51 and 60% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
gr_61_70_p	% Land area with gradient 61-70%	Percentage of land area in a watershed that is located on a gradient between 61 and 70%. This percentage is derived by dividing the land area on a gradient between 61 and 70% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
gr_71_up_p	% Land area with gradient >70%	Percentage of land area in a watershed that is located on a gradient greater than 70%. This percentage is derived by dividing the land area on a gradient greater than 70% by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
north_p	% Northern aspect area	Percentage of northern aspect land area on a gradient greater than 2% with an azimuth between 337.6 and 22.5 degrees. This percentage is derived by dividing the northern aspect land area with an azimuth between 337.6	%	1	Watershed Atlas BTM Land Use TRIM DEM

		and 22.5 degrees by the land area of the watershed.			
noreast_p	% Northeastern aspect area	Percentage of northeastern aspect land area on a gradient greater than 2% with an azimuth between 22.6 and 67.5 degrees. This percentage is derived by dividing the northeastern aspect land area with an azimuth between 22.6 and 67.5 degrees by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
east_p	% Eastern aspect area	Percentage of eastern aspect land area on a gradient greater than 2% with an azimuth between 67.6 and 112.5 degrees. This percentage is derived by dividing the eastern aspect land area with an azimuth between 67.6 and 112.5 degrees by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
soueast_p	% Southeastern aspect area	Percentage of southeastern aspect land area on a gradient greater than 2% with an azimuth between 112.6 and 157.5 degrees. This percentage is derived by dividing the southeastern aspect land area with an azimuth between 112.6 and 157.5 degrees by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
south_p	% Southern aspect area	Percentage of southern aspect land area on a gradient greater than 2% with an azimuth between 157.6 and 202.5 degrees. This percentage is derived by dividing the southern aspect land area with an azimuth between 157.6 and 202.5 degrees by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
souwest_p	% Southwestern aspect area	Percentage of southwestern aspect land area on a gradient greater than 2% with an azimuth between 202.6 and 247.5 degrees. This percentage is derived by dividing the southwestern aspect land area with an azimuth between 202.6 and 247.5 degrees by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
west_p	% Western aspect area	Percentage of western aspect land area on a gradient greater than 2% with an azimuth between 247.6 and 292.5 degrees. This percentage is derived by dividing the western aspect land area with an azimuth between 247.6 and 292.5 degrees by the land area of the watershed.	%	1	Watershed Atlas BTM Land Use TRIM DEM
norwest_p	% Northwestern aspect area	Percentage of northwestern aspect land area on a gradient greater than 2% with an azimuth between 292.6 and 337.5 degrees. This percentage is derived by	%	1	Watershed Atlas BTM Land Use TRIM DEM

		dividing the northwestern aspect land area with an azimuth between 292.6 and 337.5 degrees by the land area of the watershed.			

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