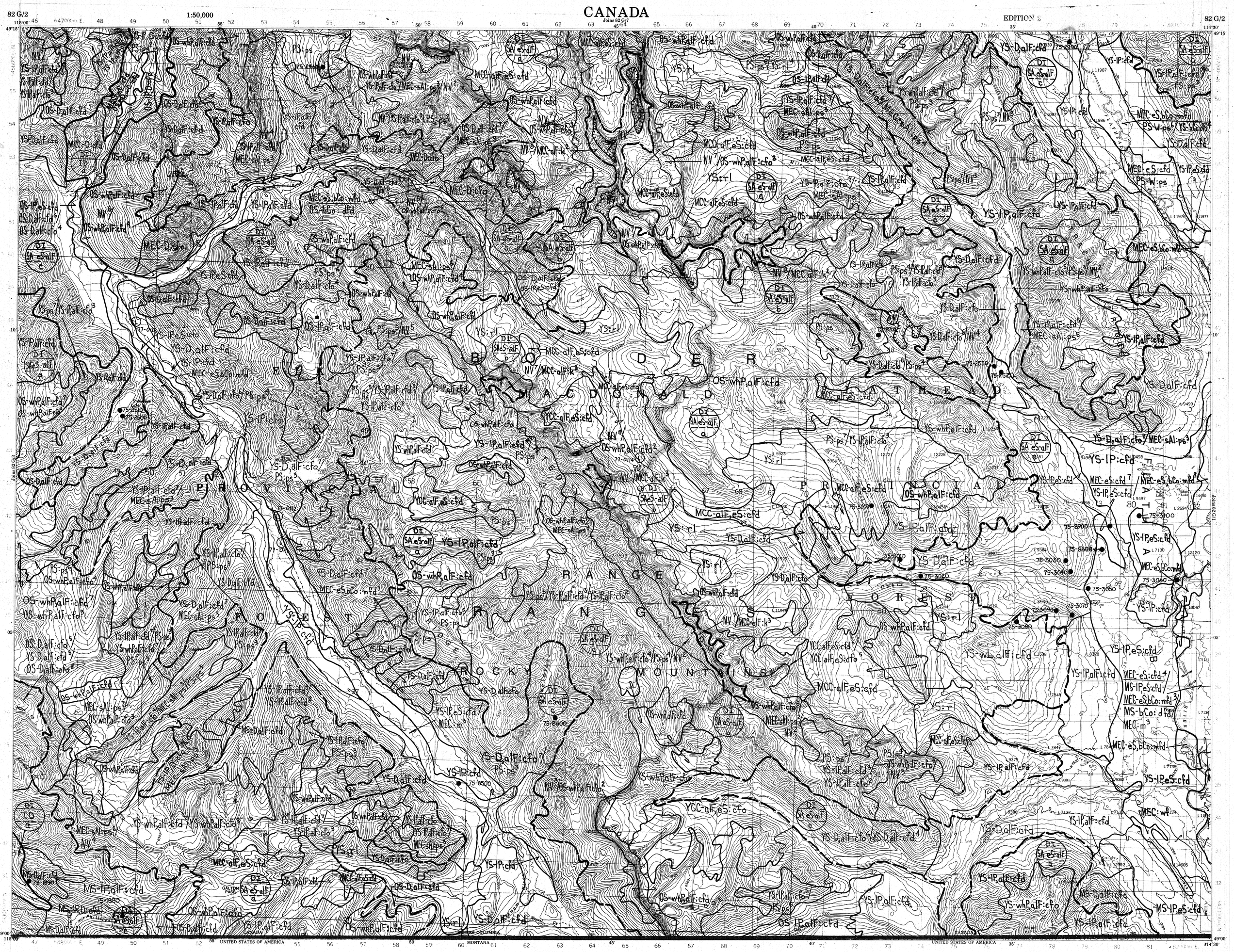
EAST KOOTENAY
1978-79, 82 G/2



LOWER FLATHEAD

KOOTENAY LAND DISTRICT

BRITISH COLUMBIA

Scale 1:50,000 Échelle

Miles 1 0 1 2 3 Milles

Metres 1000 0 1000 2000 3000 4000 Mètres

Yards 1000 0 1000 2000 3000 4000 Verges

Produced by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES. Updated from aerial photographs taken in 1969. Culture check 1970. Printed 1973.

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Roads.	Routes.		
loose or stabilized surface, all weather	gravier aggloméré, toute saison	2 lanes or more 2 voies ou plus	less than 2 lanes moins de 2 voies
loose surface, dry weather and unclassified streets	de gravier, temps sec et rues hors classe		
cartrack	de terre		
trail or portage	sentier ou portage		

This Provisional Map is equivalent to a standard map in accuracy of content

Some names on this map are not yet official. Corrections or additions are invited by the Surveys and Mapping Branch

CONTOUR INTERVAL 100 FEET

Elevations in Feet above Mean Sea Level

North American Datum 1927

Transverse Mercator Projection

Cette carte provisoire équivaut une carte régulière au point de vue précision de l'information

Certains noms inscrits sur cette carte ne sont pas encore officiels. La Direction des levés et de la cartographie saurait gré au public de lui signaler corrections et additions.

ÉQUIDISTANCE DES COURBES 100 PIEDS

Élévations en pieds au-dessus du niveau moyen de la mer

Système de référence géodésique nord américain, 1927

Projection transverse de Mercator

Édition par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES. Mise à jour à l'aide de photographies aériennes prises en 1969. Vérification des ouvrages en 1970. Imprimée en 1973.

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82G/2

VEGETATION

FOREST ZONATION AND LANDSCAPE UNITS

for the East Kootenay Map area

1. Explanatory Notes

Vegetation map shown Forest Regions, Zones, Subzones, and vegetation units. Forest Regions, Zones and Subzones are the basic building blocks of this biophysical classification. A landscape unit is an area that is relatively homogeneous with respect to soils, surficial materials, disturbance history, climate and macro vegetation. Vegetation maps form a necessary input towards resource management alternatives, constraints, use and productivity.

This legend describes vegetation maps at a scale of 1:50 000 for mapsheets in 82G, J and O.

The map must be used in conjunction with the Explanatory Legend booklet. (See Box 10)

More detailed legends or reports may be available for this study area (See Box 10).

2. Map Boundaries and Plot Symbols

- Biophysical Forest Region
- Biophysical Forest Zone
- Biophysical Forest Subzone
- Landscape unit
- NV — Non-vegetated landscape unit (no zonal or subzonal connotations)
- 79-37253 — Vegetation plot with a general soil description
- L 79-37254 — Vegetation plot with a detailed soil description and laboratory analysis

3. Examples of Map Symbols

(a) Biophysical Forest Regions, Zones and Subzones (See Box 5)

IWB — REGION
IwC — ZONE
a — SUBZONE

(b) Landscape Unit

Example 1: MCC - wH, wC:cfd
ECOLOGICAL STATE (See Box 6) / PLANT SPECIES (See Box 7) / STAND APPEARANCE (See Box 8)

Example 2: MEC - m
ECOLOGICAL STATE (See Box 6) / STAND APPEARANCE (See Box 8)

Example 3*: MEC - bCo, eS : mfd / MS - bCo, eS : mfd

* For some landscape units both seral and climax conditions are shown. These units have the seral condition in the lower part of the symbol. They are expected to lead to the climax condition shown in the upper part. The two parts are separated with a horizontal line.

4. Composite Units

Composite units are employed where two or three types of landscape units are so distributed that they cannot be designated as separate units at the scale of mapping.

Superscript numbers show the relative percentages in tens of each landscape unit.

MCC - eS, dlF : cfd^5 / MEC - m^3 / MEC - sAl - ps^2

50% of unit — 30% of unit — 20% of unit

5. Biophysical Forest Regions, Zones and Subzones

Forest Region[1]	Map Symbol	Forest Zone[2] and Subzone[3]
DRY INTERIOR REGION (ID)		INTERIOR ROCKY MOUNTAIN DOUGLAS-FIR ZONE (ID)
	DI ID a	a) Lodgepole pine subzone (lacks ponderosa pine as a potential seral species)
	DI ID b	b) Ponderosa pine subzone (with ponderosa pine and lacks western larch as potential seral species)
	DI ID c	c) Western larch - ponderosa pine subzone (with ponderosa pine and western larch as potential seral species)
		SUBALPINE ENGELMANN SPRUCE-ALPINE FIR ZONE (SAeS-alF)
	DI SAeS-alF a	a) Lodgepole pine-whitebark pine subzone (lacks Rocky Mountain Douglas-fir as a potential seral species)
	DI SAeS-alF b	b) Krummholz subzone (trees have stunted growth form and are layered in island patterns)
	DI SAeS-alF c	c) Rocky Mountain Douglas-fir-lodgepole pine subzone (with Rocky Mountain Douglas-fir as a potential seral species)
		ALPINE TUNDRA ZONE (At)
	DI At	subzones have not been determined
ANTERIOR WET BELT REGION (IWB)		INTERIOR WESTERN HEMLOCK-WESTERN RED CEDAR ZONE (IwH-wC)
	IWB IwH-wC a	a) Rocky Mountain Douglas-fir lodgepole pine-western larch subzone (lacks alpine fir and Engelmann spruce as potential seral species)
	IWB IwH-wC b	b) Lodgepole pine-Engelmann spruce-alpine fir subzone (with alpine fir and Engelmann spruce as potential seral species)
		INTERIOR WESTERN RED CEDAR ZONE (IwC)
	IWB IwC a	a) Rocky Mountain Douglas-fir subzone (lacks alpine fir and Engelmann spruce as potential seral species)
	IWB IwC b	b) Lodgepole pine-Engelmann spruce-alpine fir subzone (with alpine fir and Engelmann spruce as potential seral species)
		SUBALPINE ENGELMANN SPRUCE-ALPINE FIR ZONE (SAeS-alF)
	IWB SAeS-alF a	a) Forested subzone

[1] A Biophysical Forest Region is an area in which the broad regional climate and physiography determine the definitive vegetation patterns of the region. Regions can be further divided into Sections, Zones and Subzones.

[2] A Biophysical Forest Zone is an area within a Forest Region of which the dominant vegetation of the climax stands on similar soils and terrain is identical. Both climate and topographic conditions determine the definitive vegetation pattern of zones.

[3] A Biophysical Forest Subzone is an area within a Forest Zone defined on the basis of climate-related successional trends of dominant vegetation.

6. Ecological State

Ecological State is the successional stage to which vegetation has developed. The successional stages are determined by plant community structure and plant competition relationships in the community.

DC	disclimax
MCC	maturing climatic climax (usually older than 60 years)
MEC	maturing edaphic climax (usually older than 60 years)
MS	maturing seral (usually between 60-140 years)
OS	overmature seral (usually older than 140 years)
PS	pioneer seral
YCC	young climatic climax (usually younger than 60 years)
YEC	young edaphic climax (usually younger than 60 years)
YS	young seral (usually younger than 60 years)

7. Plant Species

Tree species symbols are used to signify a vegetation type. Because of the natural variability of the vegetation, the indicated species may be dominant or even absent from some sites, but many of the characteristics of the typical vegetation will occur.

aL	alpine larch	tA	trembling aspen
aF	alpine fir	w	willow
bCo	black cottonwood	wB	common paper birch
D	Rocky Mountain Douglas-fir	wC	western red cedar
eS	Engelmann spruce	wH	western hemlock
lP	lodgepole pine	whP	whitebark pine
pP	ponderosa pine	wL	western larch
sAl	Sitka mountain alder	wS	white spruce

8. Stand Appearance

Stand Appearance is the structure and appearance of the vegetation, regardless of the species of which it is composed.

Forested Units		Non-Forested Units	
cfd	coniferous forest - dense	at	alpine tundra
cfo	coniferous forest - open	c	cultivated undifferentiated
cfp	coniferous forest - parkland	cc	cultivated cover crop
dfd	broadleaved forest - dense	cf	cultivated field
dfo	broadleaved forest - open	ch	cultivated hedgerow
dfp	broadleaved forest - parkland	k	krummholz
mfd	mixed forest - dense	m	meadow
mfo	mixed forest - open	nc	nonvegetated
mfp	mixed forest - parkland	p	pioneer undifferentiated
		pa	pioneer herb
		ps	pioneer shrub
		r	recently logged
		rl	rockland
		s	steppe
		w	wetland undifferentiated
		wb	wetland bog
		wf	wetland fen
		wm	wetland marsh
		ws	wetland swamp

9. Sources of Information

a. B.C. Ministry of Forestry - Forest cover maps for Public Sustained Yield Units and Parks:

i. Kootenay National Park - 1954
ii. Cranbrook P.S.Y.U. - 1964
iii. Upper Kootenay P.S.Y.U. - 1965
iv. Windermere P.S.Y.U. - 1968
v. Creston P.S.Y.U. - 1973
vi. Invermere P.S.Y.U. - 1973
vii. Individual sample volume statements - 867 plots

b. Galloway Lumber Company Ltd.

i. Tree Farm Licence 13 - forest cover maps
ii. Individual sample volume statements - 83 plots

c. Crowsnest Industries Ltd.

i. Tree Farm Licence 27 - forest cover maps

d. B.C. Ministry of Environment, Resource Analysis Branch

i. Terrain maps - 1979
ii. Ecology maps (1968, 1974-1978)
iii. Climate maps (preliminary) - not available
iv. Vegetation survey (1968, 1974-1977) - 1010 plots

e. B.C. Ministry of Environment, Surveys and Mapping Branch

i. 80 chain air photographs - 1972

10. For Further Information

A. References:

(a) Vegetation Mapping Methodology Manual, Terrestrial Studies Branch, Victoria, B.C. (in preparation).

(b) Explanatory Legend for Vegetation Maps of the East Kootenay Area, Terrestrial Studies Branch, Victoria, B.C., 1980.

(c) Biophysical Resources of the East Kootenay Area: Vegetation, Terrestrial Studies Branch, Victoria, B.C., (in preparation).

B. Additional vegetation data and more detailed information (1968, 1974-76) available from:

Operations Manager
Terrestrial Studies Branch
Ministry of Environment
Parliament Buildings
Victoria, B.C. V8V 1X4

C. Additional vegetation maps available from:

Map Library
Assessment and Planning Division
Ministry of Environment
Parliament Buildings
Victoria, B.C. V8V 1X4

11. Credits

Mapping supervised by E.C. LEA

Mapping correlated by E.C. LEA

Date of field mapping 1978-79

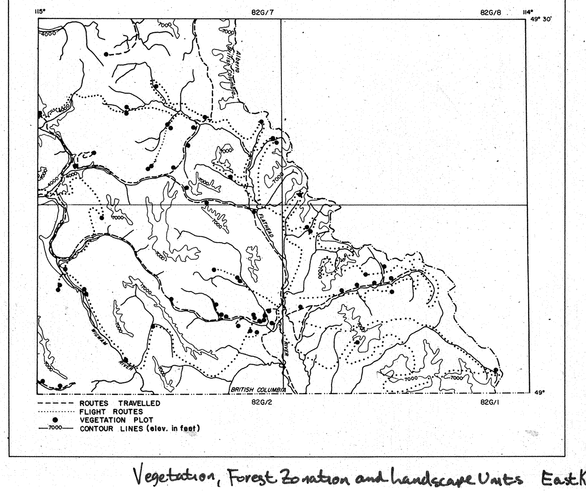
Drafted by Cartography Unit, Resource Analysis Branch, Ministry of Environment, Kelowna, B.C.

Date drafted 1978-79

Revision dates _____, _____, _____

Base map provided by Surveys and Mapping Branch, Ministry of Environment, Victoria, B.C.

12. Observation and Sample Plot Distribution



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Vegetation, Forest Zonation and Landscape Units East Kootenay 82G/2