Preliminary Edition

For Review only.

BRITISH COLUMBIA FOREST LAND CLASSIFICATION SYSTEM

= SECOND APPROXIMATION =

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BRITISH COLUMBIA FOREST SERVICE CLASSIFICATION SYSTEM

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INTRODUCTION

The Second Approximation of the British Columbia Forest Land Classification System has been undertaken to incorporate the experience gained in the application of the system over the last several years.

During the coming summer, the Second Approximation will be tested by the authors in their respective map areas before a final review in 1974-75.

May/1974

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Mapping System

The revised system follows in general, concepts of the First Approximation. However, there are significant changes in the execution and implementation of the system which require familiarization.

A summary of the Second Approximation is given below (see Appendix I):

PHASE I - Basic Mapping Units

Level 1 - Bedrock and surficial geology.

One general map presenting bedrock and surficial geology information will be prepared. As the mapping detail increases, optional separate maps may be prepared to meet the needs of individual agencies. (Level 1 (a) - Bedrock; Level 1 (b) - Surficial geology).

Level 2 - Geo-Units. (Geo-Unit Drainage classes)

This map series will outline depth, texture, slope, and drainage. Soil series may be developed from the Geo Unit framework. (Aspect will be utilized at the interpretation level and noted in a report).

Level 3 - Vegetation and Climatic Zones.

Climatic data will be included where available.

A general breakdown by biogeoclimatic zones or sub-zones is essential - detailed vegetation maps are optional.

Level 4 - Land Management Units.

This mapping level will be prepared on the basis of Levels 1 to 3.

Land Management Units are suggested as basic landscape blocks which present uniformity in respect to soil texture, drainage and inherent fertility and that are optimum in size for operational land management decisions. (1) They are developed as groupings of Geo-Units within the restrictive framework provided by geology, surficial material, landforms vegetation and climate. For example, a Land Management Unit boundary should not cross over two vegetation zones, or surficial materials, unless there is some acceptable reason to justify such an undertaking.

The Land Management Unit (LMU) is similar to and may be closely correlated to soil association which was suggested in the first approximation as the operational land management unit.

LMU is an alternative to soil Association and where soil series are identified and mapped for the area in question, the latter may be used for management and interpretation purposes.

PHASE II - Resource Information

This information may be prepared either in map form or in an associated report. Some of the resource information which may be included are:

1. Forest cover
2. Fish
3. Wildlife
4. Recreation
5. Water Resources
6. Mining, etc.

(1) Land Management Units have been developed and successfully employed by Mr. D. Rawlings in his mapping on the west coast of Vancouver Island. (see References)

The map groups prepared will depend upon inventory data when available from Canadian Land Inventory, B.C. Land Inventory, British Columbia Department of Agriculture, Geological Surveys of Canada, British Columbia Department of Mines and Petroleum Resources, Fish and Wildlife Branch, etc.

PHASE III - Interpretation and Grouping

Interpretations can be carried out for many objectives and be presented either in map or table format. Grouping is undertaken when simplification of the interpretive information is called for, and in general, is presented on a map.

Interpretations can be made both at general or specific levels (see Appendix II). When there is a need for it, the interpretation can also be carried out from various components (soils, vegetation, geology) within each unit.

PHASE IV - Decisions and implementations

Decisions and implementation (integrated Resource Management) incorporate PHASE I, II, and III, at the planning and field level.

In this phase, depending on the nature of the problem under consideration, a policy input or joint decision and implementation by various resources agencies may be necessary.

NOTES AND COMMENTS

Mapping Scale: The scale of 1" = ½ mile (1" = 40 chains) is suggested for the operational mapping. However, a large scale, 1" = ¼ mile (1" = 20 chains), or a smaller scale, 1" = 1 mile (1" = 80 chains) may be used at the discretion of the individual agencies.

Mapping Legend: An outline of the proposed mapping legend is given in Appendix III.

REFERENCES

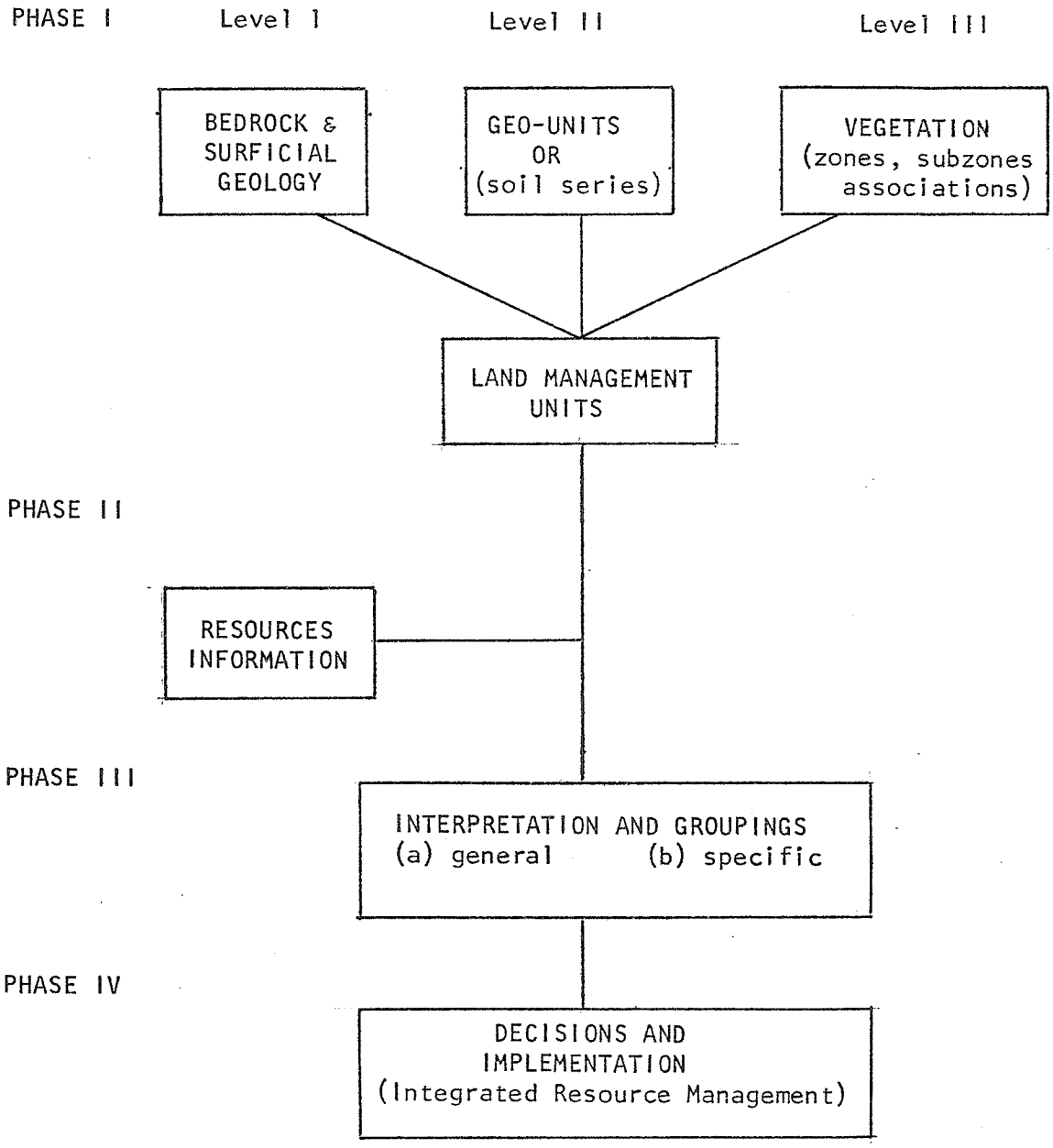
Nichols, S. 1971. The Major Soils of San Juan Valley Their Productivity and Interpretation for Forestry Practices. Unpublished Report.

Keser, N. 1970. A Mapping and Interpretation System for the Forested Lands of British Columbia - First Approximation. Research Note. 54, B.C. Forest Service.

Rawlings, D. 1972. Forest Land Classification - Mapping, Interpretation and Uses. T.F.L. 25, Block 1. Unpublished Report.

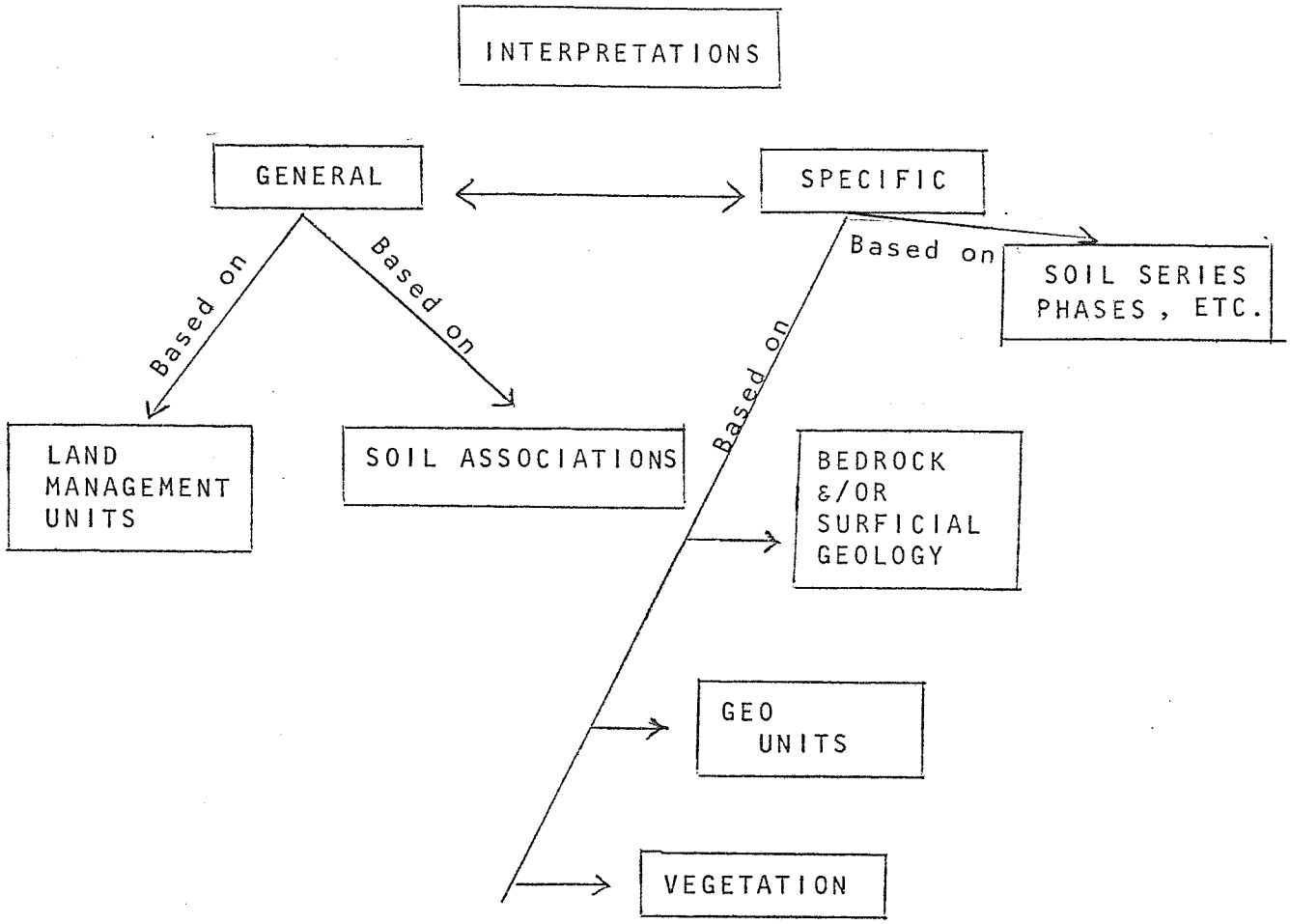
APPENDIX I

B. C. FOREST LAND CLASSIFICATION SYSTEM



APPENDIX II

INTERPRETATIONS AND GROUPINGS



Groupings: It is Undertaken when necessary by assembling the units with same and/or similar interpretations.

ROCK TYPES, UNIT LANDFORMS AND MAPPING SYMBOLS

- **BEDROCK** B
  - Igneous i
    - intrusive ii
    - extrusive ie
  - Sedimentary s
    - coarse grained sc
    - fine grained st
    - carbonates sl
    - evaporites se
  - Metamorphic m
    - foliated mf
    - non-foliated mn

- **ICE-GLACIER** I
  - ice or snowfield If
  - Valley glacier Iv
  - Cirque glacier Ic
  - Rock glacier Ir
  - Hanging Valley Ih
  - Meltwater channel Im
  - Arrete Ia
  - Col Ir
  - Horn In
  - Tarn It
  - Kettle Ik

- **GLACIAL** T
  - Till plain Tp
  - Basal till Tb
  - Ablation till Ta
  - Lateral moraine Tl
  - Medial moraine Tm
  - Terminal moraine Tt
  - Drumlin Td
  - Rock drumlin Tr

- **GLACIOFLUVIAL** G
  - Outwash plain Gp
  - Valley train Gv
  - Terrace Gt
  - Kame Gk
  - Esker Ge
  - Delta Gd
  - Crevasse fillings Gf

- **FLUVIAL** F
  - Flood plain Fp
    - Bar type Fb
    - Bar-meander type Fm
    - Complex Fx
    - Recent Fr
    - Sloughs Fs
    - Old channel Fo
    - Oxbows Fw
    - Levee Fl
  - Terrace Ft
  - Delta Fd
  - Fan Ff
  - Fan delta Fn
  - Bajada Fj

- **MARINE** M
  - Coastal plain Mp
  - Terrace Mt
  - Beach
    Beach ridge
    Strandline Mb

- **LACUSTRINE** L
  - Lakebed
    Fluvial Lf
    Glacial Lg
  - Beach
    Beach ridge
    Strandline Lb

- **AEOLIAN** A
  - Loessal plain Ap
  - Dune
    Barchane Ab
    Transverse At
    Longitudinal Al
    Coastal Ac
    Complex Ax
    Blowout Ao

- **ORGANIC** O
  - Muck Om
  - Peat Op

- **COLLUVIAL** C
  - Cone Cc
  - Talus, scree Ct

- **MASS MOVEMENTS** Q
  - Landslide Ql
  - Debris flow Qd
  - Debris avalanche Qe

Bedrock - till complexes:

B_1 = 40%B - 60T
B_2 = 60%B - 40T
B_3 = 80%B - 20T

UNIT LANDFORM PHASES:

- EROSION E
  - Gully Eg
  - Sheet Es