
Traditional Use Studies

Data Capture Specifications

Prepared by
Ministry of Forests
Aboriginal Affairs Branch
for the
Resources Inventory Committee

March 12, 2001

Version 1.0

© The Province of British Columbia
Published by the
Resources Inventory Committee

National Library of Canada Cataloguing in Publication Data

Main entry under title:

Traditional use studies

Available on the Internet.

Includes bibliographical references: p.

ISBN 0-7726-4563-9

1. Land use - British Columbia - Maps - Methodology. 2. Land use - British Columbia - Databases - Methodology. 3. Indians of North America - British Columbia - Social life and customs - Maps - Methodology. 4. Indians of North America - British Columbia - Land tenure - Maps - Methodology. 5. Human geography - British Columbia - Maps - Methodology. I. Resources Inventory Committee (Canada) II. British Columbia. Ministry of Forests. Aboriginal Affairs Branch.

HD319.B7T77 2001 333.73'089'970711 C2001-960141-7

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Preface

The purpose of this document is to define the specifications for capturing Traditional Use Study (TUS) spatial data and database structure. These specifications do not provide data loading procedures, which attempt to define methodology or procedures. This document only defines the data that must be produced as a deliverable. It provides general data capture specifications, for all formats. In addition, format specifications are provided for IGDS, ESRI Shape (ArcView), Arc/Info, PAMAP and manual (paper) maps.

The intent is for this document to be used by three major groups:

- 1) Government staff managing contracts for the collection of TUS data, or maintaining the resource inventory datasets;
- 2) First Nation's staff and government staff actively involved in the collection, storage and maintenance of TUS digital data sets;
- 3) Provincial government staff seeking to understand the meaning and structure of TUS datasets for use in analysis and graphic display.

First Nations and government staff directly involved with TUS process should refer to these specifications for technical guidance on the form and structure of the data sets they prepare. Managers of such data-collection projects should use these specifications to evaluate whether TUS data is captured adequately.

Acknowledgments

Funding of the Resources Inventory Committee work, including the preparation of this document, is provided by the Corporate Resource Inventory Initiative (CRII) and by Forest Renewal BC (FRBC). Preliminary work of the Resources Inventory Committee was funded by the Canada-British Columbia Partnership Agreement of Forest Resource Development FRDA II.

The Resources Inventory Committee consists of representatives from various ministries and agencies of the Canadian and the British Columbia governments as well as from First Nations peoples. RIC objectives are to develop a common set of standards and procedures for the provincial resources inventories, as recommended by the Forest Resources Commission in its report “The Future of our Forests”.

For further information about the Resources Inventory Committee and its various Task Forces, please access the Resources Inventory Committee Website at:
<http://www.for.gov.bc.ca/ric>.

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1 General Specifications

The data collected during a TUS is defined as a simple data model because only one attribute is stored or implied in the spatial data. There are three types of spatial data: point, line, polygon each representing a ***Traditional Use Site (TU Site)**. Examples are as follows: *(please see the next page for a graphical representation)*

1. Point (grave house, fishing station)
2. Line (hunting trail, migratory trail)
3. Polygon (aboriginal logging area, hunting area, berry picking area)

All Traditional Use Sites must contain a unique ID referred to as the TUS_ID. The TUS ID is the primary key for the appropriate attribute record. Refer to *Section 6, Attribute Capture* for details on attribute capture. All additional attributes will be captured in MS Access database format. The exact structure of this data can be found in *Appendix A – MS Access Database Structure*. A blank database for MS Access format is available from MoF Project Officers.

Many traditional use, polygon sites, overlap. For this reason the data capture tool must be capable of supporting overlapping polygons. Traditional GIS's often had or have trouble supporting this model. In CAD packages this means duplicating the line where two polygons share a boundary.

Spatial and attribute data are to be related via the TUS_ID. The exact technique will vary depending on the software product. No two sites in one TUS can have the same TUS_ID with one exception. In a case where a site is made up of double and single line water features, the feature(s) on the linear coverage and the feature(s) on the polygonal coverage will contain the same TUS_ID. Only one record will exist in the relational database. This feature will be referred to as a complex feature. *(see the example on the next page)*

TUS Data Capture Specifications

Examples for point, line and polygon coverage's follow. Note the special case for complex sites. In this case, both the polygon and linear files contain the TUS_ID 11.

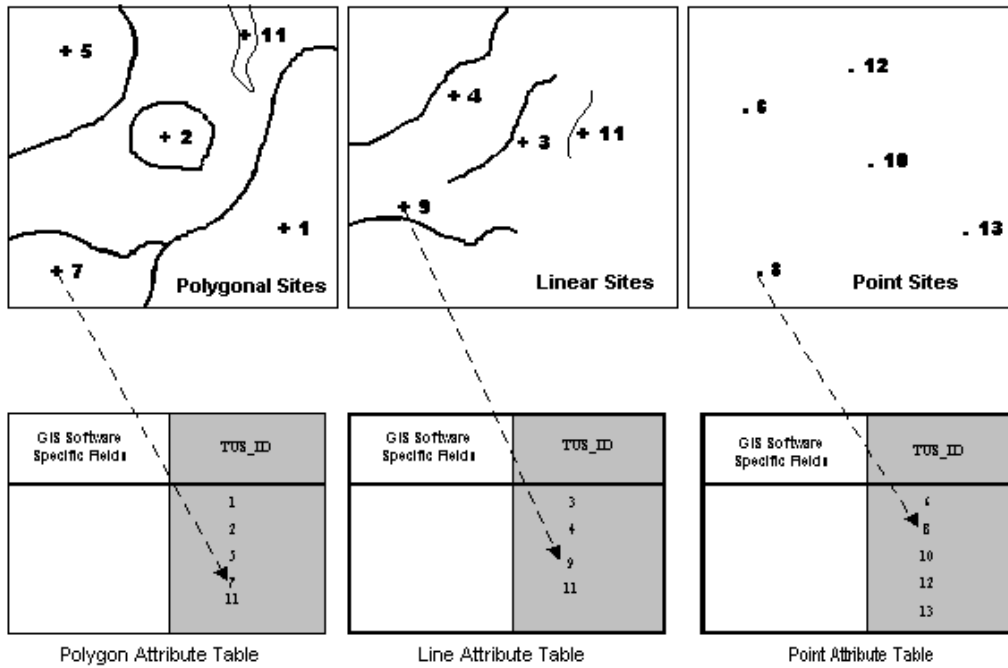


Figure 1 - Example of spatial and attribute linkages

2 Manual Research Base Maps

Information from oral interviews must be initially gathered and captured on hard copy base maps compiled at a scale of 1:50,000 or greater.

Samples of these original paper base maps, a minimum of five map sheets, must be delivered along with digital files when preliminary and final products are delivered. This will entail an extra step for projects delivering data digitally, as they will have to create these sample hard copies with any confidential FN comments removed from the maps. In addition to sample maps all manual research maps must be available upon request.

Specifications for these hard copy deliverables are included in Section 11, Manual Map Specifications.

3 Deliverable Formats

TUS project contracts will specify if final mapping deliverables will be in hard copy (paper) or digital format. If digital format is specified, the final deliverables must be delivered in ESRI Shape, ARC Export, or IGDS format, regardless of the GIS or CAD system used to capture the data. The data delivered must match the ESRI Shape or Microstation IGDS specifications defined in this document.

4 Digital Base Maps

The Provincial Baseline Digital Atlas 1:250,000, NAD 83, UTM base map series must be used as the map base for digital projects. As indicated in section 2, Manual Research Base Maps, information from oral interviews must be initially gathered and captured on hard copy base maps compiled at a scale of 1:50,000 or greater. This is because 1:250,000 maps do not provide enough detail at plot scale (paper maps) for gathering site-specific information during oral interviews. The digital resolution of the 1:250,000 files are identical to TRIM 1:20,000 digital files.

TUS data gathered using highly accurate methodologies should not be generalized when stored in the digital files. For example, data captured with GPS should be input directly into the digital file thereby retaining the accuracy of the field capture process. This will require inputting exact latitudes and longitudes or UTM coordinates into the GIS or CAD system.

DO NOT plot GPS data on to a hard copy base map and then digitize into the digital file as this introduces unnecessary error into the data capture process. The purpose of plotting all TU sites onto research paper base maps is for data verification and quality assurance processes only.

5 Digital Files - General Specifications

This section contains general specifications applicable to all digital projects, regardless of the data capture tool.

Digital files should be created as a single composite file 'TUS file' (except ARC Shape format which will have 3 files) and not on a tiled map sheet basis. Using this seamless format will avoid problems of having to merge data to create composite files in the future. Adherence to this specification will also avoid edge-matching problems associated with tiled map sheet formats.

5.1 Projection

UTM will be the specified projection for all TUS mapping deliverables. UTM is the Universal Transverse Mercator projection with specific parameters pre-defined. British Columbia spans 5 UTM zones, 7 thru 11, each zone is 6 degrees of longitude in width, the central meridian being the longitude at the midpoint of the 6 degree span. Rectangular coordinates are metric with easting values offset by 500,000 metres.

All final mapping deliverables will be provided in North American Datum 83 (NAD 83).

5.2 UTM Zones

If a project crosses a UTM zone, features crossing adjoining zones shall connect (be edge tied) at numerically exact junction points or nodes. Edge matching ensures that if data is viewed seamlessly the data will be continuous. Naming conventions for projects crossing UTM zones are defined in section 5.4, TUS File Naming Convention.

Edge matching of data between zones will be required of all final data sets. Extending the UTM projection zones beyond their defined six-degrees of longitude will not be accepted as this practice introduces an unacceptable margin of error.

All polygonal features that cross UTM zones, will be closed on the zone boundary.

5.3 North American Datum (NAD) Transformations

NAD transformations will be necessary in cases where hard copy data is captured via NAD 27 base maps (1:50 000 NTS), as the required digital project base is 1:250 000 restructured planimetry NAD 83.

It is important to note that it is not acceptable to digitize features from a NAD 27 hard copy map using corner ticks from a NAD 83 digital base map for reference. Project Officers will provide a set of positionally correct NAD 27 and NAD 83 grids upon request.

Datum transformation between NAD27 and NAD83 must use **the Canadian National Transformation matrix (version 2.0)**, as published by the Geodetic Survey of Canada, and endorsed by Geographic Data BC. This matrix consists of regularly spaced points covering

all of Canada, with X and Y shifts between NAD27 and NAD83 for each point. ARC/INFO includes this transformation matrix. If required, the transformation matrix can be acquired from TUS Project Officers.

5.4 TUS File Naming Convention

The naming convention used for the TUS file includes a five-letter project code supplied by MoF Project Officers, combined with the UTM zone, and file extension identifying the data type. An example of the naming convention for IGDS files appears below: (the 5 letter code for Gitanyow is the example used below):

Table 1 - IGDS File Naming Convention

	Project Code	UTM Zone
	↓	↓
IGDS:	GITAN-09.dgn	

Table 2 - Shape File Naming Convention

	Project Code	UTM Zone	Shape File Type
	↓	↓	↓
ESRI Shape:	GITAN-09-LINE.shp		
	GITAN-09-LINE.shx		
	GITAN-09-LINE.dbf		
	GITAN-09-POLY.shp		
	GITAN-09-POLY.shx		
	GITAN-09-POLY.dbf		
	GITAN-09-PNT.shp		
	GITAN-09-PNT.shx		
	GITAN-09-PNT.dbf		

In the case where a project crosses a UTM (Universal Transverse Mercator) zone, each zone will remain positionally correct. Two files will be submitted reflecting the two zones impacted (18 files in the case of ARC Shape format). In this case the project naming convention would be as follows:

Table 3 - Naming Conventions when study spans UTM Zones

IGDS:	GITAN-09.dgn	GITAN-10.dgn
ESRI Shape:	GITAN-09-LINE.shp	GITAN-10-LINE.shp
	GITAN-09-LINE.shx	GITAN-10-LINE.shx
	GITAN-09-LINE.dbf	GITAN-10-LINE.dbf
	GITAN-09-POLY.shp	GITAN-10-POLY.shp
	GITAN-09-POLY.shx	GITAN-10-POLY.shx
	GITAN-09-POLY.dbf	GITAN-10-POLY.dbf
	GITAN-09-PNT.shp	GITAN-10-PNT.shp
	GITAN-09-PNT.shx	GITAN-10-PNT.shx
	GITAN-09-PNT.dbf	GITAN-10-PNT.dbf

Only TUS point, line, and polygon features should be stored in the TUS file. All digital base map or reference features should be stored in other files, which will not be submitted with project deliverables. This will reduce the size of a TUS file and isolate non TUS data.

5.5 Attribute Linkages

The only attribute stored in the spatial file is the unique TUS_ID. It is imperative that regardless of software platform a link exists between the spatial feature and the TUS_ID attribute. See sections 8 thru 12 for details specific to a particular software platform.

5.6 Feature Definitions

Point features - should only be used to describe sites that are *less than 1 hectare in area*, for example, fishing stations or burial sites. Any site larger than this should be defined as a polygon.

Linear features - should be used to describe sites that are *less than or equal to 20 metres in width*, such as trails. In this case the centreline of the site is captured as a linear feature. A linear TUS site should be captured as a closed polygon when the width of the site is greater than 20 metres.

Polygonal features – should be used to describe sites that are *greater than 1 hectare in size and have a width of greater than 20 metres*.

Complex features – should be used to describe features that combine polygonal and linear elements to describe site.

5.7 Multiple Site Uses Under One TUS_ID

The attribute specifications allow for a single site to have multiple site uses. These site uses must take place within the identical spatial area. This is not intended as a way to generalize several sites in the same proximity.

In contrast, if there are many references to a single TU site, the site data must not be duplicated in the spatial file. Identification of multiple references for the same site can be made via the attribute database.

Additionally, grouping of several site uses within a single seasonal polygon will not be accepted. An example of this would be grouping a deer wintering site, ice fishing site, and winter village site within one polygon because they were used in conjunction with each other. Each site use should be identified as a separate site with its own TUS_ID. The linkage of sites to a seasonal usage can be achieved via the separate attribute database but should not be indicated in the spatial file.

5.8 Data Capture Accuracy

Digitizing accuracy specifies how closely the location and shape of a feature in its digital coordinate space reflects its location and shape in mapping on physical media such as paper or mylar, excluding interpretation error¹. This error is commonly associated with the digitizing process. The required accuracy/error of mapped features is related to the scale of data capture, and can be specified in terms of deviation between check plots and physical media.

All features must be within 2 mm of the original map features when plotted on check plots at map scale. For data captured from existing hardcopy maps at 1:20,000 scale, all features must be within 20 metres of their mapped location in projection coordinates. For data captured from existing hardcopy maps at 1:50,000 scale, all features must be within 50 metres of their mapped location in projection coordinates. Features, not within the margin of error defined above which are a result of interpretation of hydrographic features, will not be required to meet the above mentioned capture accuracy.

¹ Interpretation error is the error introduced when locating a feature based on information that is not precise or human interpolation is required. (E.g. forest cover polygons which are based on species). Section 6.8 reference: Standard for Developing Digital Data Specification Standards Documents, by Digital Data Working Group, Resources Inventory Committee February 05, 1998 Version 1.0

5.9 Precision Input (GPS / Surveys)

Any TU Sites that have been located via a GPS or pin-based survey require precision input (e.g. COGO) into a GIS or CAD package. If sites are instead plotted onto hard copy maps and then digitized an unnecessary margin of error will be introduced to the sites location.

For specifications on the use of a GPS for ground surveys please refer to the following document available from MoF Project Officers.

British Columbia Standards Specifications and Guidelines for Resource Surveys Using GPS, Release 2.0, March 1997.

5.10 Using Base Features to Define Sites

When a hydrographic feature on base map defines a TU Site, the TU site should be constructed digitally by copying the intended hydrographic feature from the digital base map. It should not be digitized directly from the hard copy map.

TU Sites that follow double line water features will be defined by polygons. Both linear and polygonal feature types may be required to define a TU Site that follows a hydrographic feature. An example of this would be a river that begins as a single line feature and expands to become a double line feature. This feature type is referred to as a complex feature. (See section 1, General Specifications.)

6 Attribute Capture

All attributes will be captured external to the spatial capture tool and related via the TUS_ID. The spatial file is used only to establish the location of the site. As noted in section 5.5, Attribute Linkages, the only attribute stored in the GIS or CAD application is the TUS_ID. For GIS analysis, attribute data can be related to the spatial data via the TUS_ID. Two formats will be accepted for attribute data associated with TU Sites:

1. MS Access (See Appendix A)
2. Hard Copy Site Forms (See Appendix B)

6.1 MS Access Site Forms

MS Access digital submission must be structured exactly as specified in *Appendix A*. A template, with sample data, for MS Access format is available from your TU Project Officer. Where columns end in a name of "code" or "cd" (e.g. SITE_USE_CODE) use the codes identified in *Appendix E – Code Values*. MS Access 97 is the required delivery format.

The database must contain all the tables required to capture TUS site information. The following table identifies which database tables must be completed in all cases, which need to be submitted to the ministry, and which may be retained by the First Nation. Mandatory columns are set appropriately in the database.

Table 4 - TUS Attribute Tables

Table Name	Usage
TRADITIONAL_USE_STUDY	Must be submitted to the province. This table identifies general information about the whole study area. Only one record will be present per traditional use study.
TUS_SITES	Must be submitted to the province. This table contains the key information about a traditional use site. One record must be present for each traditional use site.
SOURCE_MAPS	Must be submitted to the province. Identifies the maps that were used in interviews as well as the base map for each TU site.
ORAL_REFERENCES	Must be submitted to the province. Identifies the tape, tape side and tape counter for each interview. One record is required per site, per interview.
SITE_USES	Must be submitted to the province. If desired a code of available on request can be recorded. Multiple site uses can be identified per site.
*COMMITMENTS	Must be submitted to the province. Identifies any commitments for the protection of land that do not involve any legal statutes.
*LINGUSTIC_AFFILIATIONS	Must be submitted to the province. One record will exist per linguistic affiliation applicable for a particular study area.
*WRITTEN_REFERENCES	Must be submitted to the province. This table identifies any known references to the site from other sources. (e.g. published book, inventory)
*SITE_DESCRIPTIONS	Must be completed and kept by the First Nation. Provides information on how to access a particular site and/or the surrounding landscape.
*SITE_NAMES	Must be completed and kept by the First Nation. This table identifies various names associated with a site.
*SOCIAL_ORGANIZATIONS	Must be completed and kept by the First Nation. Defines the social organizations connected to a particular site.

*Note : Tables identified with a * must be completed only if applicable. For example not all sites will have a name.*

6.2 TUS Paper Forms

If you do not have computer facilities then paper forms can be completed and submitted with the study. Preference is for the information to be entered into a digital database for ease of access within the First Nation office and for transfer to the provincial government.

Table 5 - TUS Paper Forms

Summary Form	This form contains information that applies to the whole traditional use study. Only one of these forms must be completed per study.
Site Form	This form contains information that applies to individual sites. This information is mandatory and must be submitted to the province upon completion of the TUS. One of these forms must be completed per TUS site.
Detailed Site Information Form	This form must be completed and kept by the First Nation. It does not need to be submitted to the province but must be shown to TU Project Officers upon request. If the First Nation chooses, the completed form can be submitted with the TUS. One of these forms must be completed per TUS site.

A detailed description and examples for each data element can be found in *Appendix D – Attribute Definitions*. The descriptions are cross-referenced to the *Appendices A and B*.

7 IGDS Specifications

IGDS specifications include the delivery of a single TUS file with all TU sites and feature types included in this composite file. The file will be named using a 5 letter TUS Code (as supplied by TU Project Officers at AAB), the appropriate UTM zone, and the standard 'dgn' extension. (See TUS File Naming Convention.)

All feature types should be defined as primary and not construction.

A seed file with the correct design file setting can be obtained from your TU Project Officer. In addition, a sample IGDS file containing a point, line and polygon site can be acquired.

7.1 Working Units

The IGDS files must have the following design plane units defined:

Master Units: Kilometers

Sub Units: Meters

1000 meters <sub-unit> per kilometer <master unit>

1000 positional units per Meter <sub-unit>

7.2 Global Origin

The global origin of the IGDS file must be set as follows:

Global Origin: 4:0.0000, -5296:0.0000

7.3 Text Node Attributes

Text nodes (IGDS element type 7) are used to identify TUS_ID's. The TUS_ID is added to a text node by using the edit text function, adding a hard return (Enter key), and adding the TUS_ID as the second line of text. If the hard return is not used before adding the TUS_ID the text node will become text (Type 17).

The IGDS node number is insignificant in defining the TUS_ID. It is the second line of text that contains the TUS_ID.

All text nodes used to identify TUS_ID's will have the following attributes:

Font: 3

Height and Width: 0:100:0

Line spacing: 0:100

Justification: Center Center

The following specifications for point, linear, polygon and complex sites all require a text node to define the TUS_ID. Use these text node attribute specifications for all the following feature types. The level and color applied to each text node is different for each feature type. See the following sections.

7.4 Point Features

1. A text node (IGDS element type 7) will represent TUS sites that are defined as point features.
2. The cross hairs of the text node (node origin) will define the exact location of the TUS site.
3. The text node will be edited and TUS_ID added to the node as text. See section 7.3, Text Node Attributes. The point features will have the following attributes.

Table 6 - IGDS Point Feature Attributes

Level:	30
Color:	30
Line Code:	0
Weight:	0

7.5 Linear Features

1. Linear sites will be defined by a complex chain(s) (IGDS element type 12).
2. Each linear feature will be graphically grouped to a single text node defining the TUS_ID. See *Text Node Attributes*.
3. In the case of a TU site defined by a broken linear element, multiple complex chains may be used to define the site. These complex strings will all be graphic grouped to a single text node defining the TUS_ID.
4. All linear features such as trails must be digitized on the centerline of the trail.

Table 7 - IGDS Linear Feature Attributes

Level:	20
Color:	20
Line Code:	0
Weight:	0

7.6 Polygonal Features

1. Polygonal sites will be defined by a complex shape (IGDS element type 14). In a case where a TUS site is defined by a several discrete polygons multiple complex shapes may be used to define the site.
2. Each polygonal site will be graphically grouped to a single text node defining the TUS_ID. In the case described in 1 where multiple complex shapes are used to define a single TUS site, these complex shapes will be linked to a single text node defining the site ID. See *Text Node Attributes*.

Table 8 - IGDS Polygonal Feature Attributes

Level:	10
Color:	10
Line Code:	0
Weight:	0

7.7 Complex Features

1. At least one complex shape with the TUS_ID being defined by a graphically grouped text node, and at least one complex chain with the TUS_ID being defined by a graphically grouped text node will define complex features.
2. Note: In this case the site must be defined as a complex site in the attribute database. See *Appendix A – MS Access Database Structure*, or *Appendix B – Sample Site Forms* for details.
3. The complex features will have the same attributes as linear and polygonal feature components as defined in *section 7.5, Linear Features* and *section 7.6, Polygonal Features*.

7.8 Valid Element Types

The only IGDS element types that should be present in an IGDS file are text nodes, complex chains, and complex shapes. The "select by palate" command should be able to be applied and should find no other data types.

8 Arc/Info Specifications

Arc/Info specifications include the delivery of either ESRI Shape files or Arc Export files. A separate coverage should be created for each of the TUS feature types, specifically Point, Linear or Polygon. All coverages must be topologically clean. See the following sections for specific details on each coverage type.

The rest of this section assumes the reader is familiar with the Arc/Info environment.

8.1 Attributes

Attribute information will consist only of the TUS_ID. This attribute should be stored in the PAT or AAT files, as an integer item type with a 9 character maximum (i.e. I99).

8.2 Projection File

All coverages must contain a projection file that defines the projection and datum and uses the CNT matrix (e.g. Datum line in projection file: NAD83 CNT).

Table 9 - ArcInfo Coordinate System Description

Projection:	UTM
Zone:	7 – 11
Units:	METER
Datum:	NAD83 CNT
Spheroid:	GRS80
Parameters:	XSHIFT – 4000, YSHIFT +5296000

8.3 Storage Precision

ARC/INFO coverage coordinates must be stored in single precision coordinates (defines numbers eight characters in width). UTM projection coordinates can be stored in single precision with a one-metre accuracy.

8.4 Point Features

1. TU point features will be stored in a separate coverage containing only TU point features. In Arc/Info these will be represented as label points.
2. The TUS_ID must be stored in the PAT file.
3. The Arc BUILD command should process the coverage without errors or warnings. The TUS point coverage should be built topologically for point feature types. Use the Arc BUILD command with the POINT option to build point topology.

8.5 Linear Features

1. TUS linear features will be stored in a separate coverage containing only TUS linear features.
2. The TUS_ID must be stored in the AAT file.
3. The Arc BUILD command should process the coverage without errors or warnings. The TUS linear coverage should be built topologically for linear feature types. Use the Arc BUILD command with the LINE option to build polygon linear topology.

8.6 Polygonal Features

1. TUS polygon coverages should be created as regions. This is the easiest way to support the overlapping polygon requirement of TUS sites.
2. All polygons must be explicitly closed areas and must close on themselves at exact coordinated junction points or nodes in x, y, (and z, where applicable).
3. No dangling nodes or undershoots are permitted.
4. Arcs should not contain pseudo-nodes (line endpoints with exactly two adjoining arcs with identical attributes), except where required by software limitations.
5. All polygons shall contain exactly one label point.
6. Every feature (arc, polygon) shall have one attribute record.
7. Coverages shall have arc topology (from node, to node, left poly, right poly, length) and polygon topology (area, perimeter).
8. No arc shall have the LEFT POLY and the RIGHT POLY being the same or equivalent polygon.
9. The Arc BUILD command should process the coverage without errors or warnings. The TUS polygon coverage should have topology built for both arc and polygon feature types. Use the Arc BUILD command with the POLY option to build polygon topology and the BUILD command with the LINE option to build arc topology.

10. The Arc LABELERRORS command should generate no warnings on a polygon coverage. With the exception of the universal polygon, 'Polygon 1 has 0 label points'.
11. The Arc NODEERRORS command should generate no warnings on a polygon coverage.

8.7 Complex Features

At least one polygon and at least one linear feature with the same TUS_ID will define complex features.

8.8 Data delivery

All Arc/Info data sets must be converted to and delivered in ESRI Shape format or Arc Export format. ESRI Shape format is preferred.

Sections 8.1 and 8.2 are derived from: Standard for Digital Terrestrial Ecosystem Mapping (TEM) Data Capture in British Columbia, Ecosystem Technical Standards and Database Manual Version 2.0, October, 1998.

9 ESRI Shapefile Specifications

ESRI Shapefile specifications include the delivery of three TUS files with point, polygon, and linear features each having their own file. Each shape file is comprised of 3 files (.shp, .dbf, .shx), making the total file count of 9 files for each project. See *TUS File Naming Convention* for more details.

9.1 Attributes

Attribute information will consist only of the TUS_ID. This attribute should be stored in the DBF file as a NUMBER with a width of 9 and 0 decimal places.

9.2 Coordinate System Description

Shape files do not contain projection information internal to the format. The shape file is largely a number of double precision coordinates used to define the coordinate space not unlike the IGDS format. Therefore the coordinate system is implied rather than explicit. The following parameters should be taken into consideration if you are doing data capture or translation to the ESRI Shapefile format.

Table 10 - Shapefile Coordinate System Description

Projection:	UTM
Zone:	7-11
Units:	METERS
Datum:	NAD 83
Parameters:	XSHIFT -4000 (metres), YSHIFT +5296000 (metres)

9.3 Storage Precision

UTM coordinates will be stored in double precision coordinates, with a one-millimeter resolution.

9.4 Point Features

1. Point features will be defined in a shapefile of type Point.
2. The .dbf will contain an attribute called TUS_ID as defined in section 9.1, Attributes.

9.5 Linear Features

1. Linear features will be defined in a shapefile of type Arc.
2. The .dbf will contain an attribute called TUS_ID as defined in section 9.1, Attributes.

9.6 Polygonal Features

1. Polygonal features will be defined in a shapefile of type Polygon.
2. The .dbf file will contain an attribute of TUS_ID as defined in section 9.1, Attributes.

9.7 Complex Features

At least one polygonal and at least one linear feature with the same TUS_ID will define complex features.

Complex features will have the same attributes as linear and polygonal features defined in sections 9.5 Linear Features and 9.6 Polygonal Features. This will be the only occasion where the same TUS_ID may appear in two different shape files (linear and polygon).

10 PAMAP Specifications

PAMAP specifications for coordinate systems and attributes will follow the model defined previously for IGDS files (See *section 7, IGDS Specifications*). Following are suggestions for PAMAP users that will allow for an easier translation to match IGDS specifications.

Table 11 - PAMAP Working Units

Horizontal Units:	meters
Vertical Units:	meters
Area Units:	hectares
Horizontal UOR:	cm
Vertical UOR:	mm

10.1 Global Origin

Offsets and multiplication factors applicable to PAMAP are available from TU Project Officers. This file is setup to match the IGDS standard in which PAMAP must be translated to:

GIS2IGDS.tbl

10.2 Conversion of Text Nodes

In PAMAP, *dbtags* should be used so that the translator will create text nodes when translating to IGDS. This is not the same as point features in PAMAP. Add your TUS_ID as label text and define the colors, sizes etc as defined in the *textindx.tbl*. Set cartographic and analytic indicators both to 0.

10.3 Conversion of Vectors and Centroids

There is no methodology to reproduce complex shapes in PAMAP, so once the polygon linear elements are translated back to IGDS it is a vector only coverage. Once translated back to IGDS the association between centroid and vectors can be rebuilt. To prepare the line work in PAMAP 'Clean Lines and Points' should be run on any vectors. This is PAMAP's vector cleaning routine to produce clean endpoint snaps, etc.

10.4 Data Delivery

All PAMAP data sets must be converted to and delivered in IGDS format. The conversion process must deliver the files with the identical data model to data created in IGDS (See *IGDS Specifications*).

11 Manual Map Specifications

This section defines the standards for preliminary and final deliverable hard copy paper maps. Hard copy maps must be at a scale of 1:50 000 or larger (i.e. 1:20 000) and follow the following specifications.

11.1 Labelling

1. Project name, map date, and deliverable type (preliminary or final) must appear in the top right corner of the map.
2. Map scale must be indicated at the bottom of every map.
3. Only the TUS_ID number should identify all sites.
4. TUS_ID number text should be arrowed in to the location of a point feature that will be indicated by a 1mm dot.
5. TUS_ID number text should be placed at the point of commencement and point of truncation of a linear feature on each map sheet it resides.
6. TUS_ID number text should be placed in the center of a polygon on each map sheet it covers. If a polygon is too small to place the label inside the polygon the label shall be placed to the outside and arrowed to the polygons outer boundary.

11.2 Use of Color

1. Point features and labels will be indicated in red. Point features will be indicated by a 1mm dot.
2. Linear features and labels will be indicated in green.
3. Polygonal features and labels will be indicated in black.
4. Arrows between labels and features will be indicated in blue.
5. Assure shades of the above colors are readily identifiable from base map colors.

Note : Sample maps are available from Ministry of Forests Aboriginal Affairs TU advisors.

11.3 Overlapping Polygons

Because of the inability to identify the lines associated with each polygon in a situation in which polygonal features overlap, a separate photocopy of each overlapping polygon will be submitted with the polygon and label highlighted in yellow. This procedure will provide for less interpretation when a digital version of the data is loaded.

Although not required, it is suggested that this procedure be carried out on digital projects to aid GIS technicians.

12 Check Plot Specifications

This section defines the standards for preliminary and final deliverable hard copies created from digital files. The following three tile sizes will be accepted for check plots:

1. 1:20,000 BCGS map sheet plotted at 1:20,000.
2. 1:50,000 NTS map sheet plotted at 1:50,000.
3. 1:250,000 NTS letter block plotted at 1:200,000.

12.1 Labelling

1. Project name, map date, and deliverable type (preliminary or final) must appear in the top right corner of the map.
2. Map scale must be indicated on the bottom of the map.
3. Only the TUS_ID number should identify all sites.
4. TUS_ID number text should be placed on the location of a point feature indicated with a dot. These may be arrowed in (for graphical purposes only) in areas of high site density.
5. Labels (TUS_ID's) must be legible at plot scale.
6. TUS_ID number text should be placed at the center of a linear feature.
7. TUS_ID number text should be placed in the center of a polygon on each map sheet it resides.

12.2 Use of Color

1. Point features and labels will be indicated in red.
2. Linear features and labels will be indicated in green.
3. Polygonal features and labels will be indicated in black.
4. Base water features will be blue.
5. Any other base map features displayed must be readily identifiable from the above features.

Note: An example of a standard hard copy map can be attained from your TU Project Officer.

13 Accepted Data Transfer Methods

The following will be acceptable methods for digital data transfer to Aboriginal Affairs Branch. Any other media types will not be accepted.

1. File Transfer Protocol (FTP)

- FTP Site: FTP.FOR.GOV.BC.CA
- User Name: Anonymous
- Password: Email ID
- Location: Branches\Aboriginal_Affairs\External\Incoming\TUS
- Create a directory based on your 5 letter TUS Code.
- Put your data into that directory.
- Call your TU Project Officer and let them know the data is there as the data is automatically deleted after 10 days.

Note : This is a secure FTP site. Once the data is transferred to the FTP site you cannot delete or overwrite it. No other external users will be able to gain access to the data. Only Ministry of Forests, Aboriginal Affairs Branch staff will be able to retrieve the data for review and ensure it is transferred to the appropriate provincial database.

2. 1.44 MB – 3.5" Floppy Disk (PC Format)
3. CD-ROM
4. 100 MB - IOMEGA ZIP Disk (PC Format)

Appendix A - MS Access Database Structure

Table 12 Index to submission requirements

PRM	Provincial Mandatory - Must be captured and submitted to the province.
PRO	Provincial Optional - The data must only be submitted when it exists.
FNM	First Nation Mandatory - The data must be captured but does not need to be submitted to the province. It must be retained by the First Nation and made available on request.
FNO	First Nation Optional - The data must only be captured by the First Nation where it is applicable.

Table 13 Traditional Use Study

tus_cd	PRM	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_name	PRM	Full name or description of the Traditional Use Study.
contract_number	PRO	The contract number assigned to the study area.
submission_date	PRO	The date the study area was submitted to the Ministry.

(Each study area will only have one record in this table)

Table 14 TUS Sites

tus_cd	PRM	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_id	PRM	Each recorded Traditional Use Site must be assigned a unique local identification number. A newly assigned identification number should include a positive integer value, and should not already be used in the database into which the site will be inserted.
site_type_code	PRM	A code representing the type of site. (Polygon, Line, Point, Complex). Complex is a special case that indicates there are both linear and polygon sites with the same Local Site ID. This is designed to handle the cases where a river made up of both single and double line features are used to identify a site.
digitized_location	PRM	Indicates if the site location has been digitized for use on a geographic information system. A yes or no answer is required.
datum_value	PRM	For digitized and/or mapped sites, identifies the datum value (i.e. NAD 27 or NAD 83). In most cases this should be NAD 83.
capture_method_cd	PRM	A code that indicates the method in which the location of the site was established. (e.g. GPS, Survey, Estimated)
latitude	PRO	The traditional use site's latitude entered in the format DDD MM SS (Degrees, Minutes, Seconds) expressed numerically. This is required for non-digital map projects only. A point representing the approximate centre of the polygon is desired.
longitude	PRO	The traditional use site's longitude entered in the format DDD MM SS (Degrees, Minutes, Seconds) expressed numerically. This is required for non-digital map projects only. A point representing the approximate centre of the

TUS Data Capture Specifications

		polygon is desired.
site_comments	FNO	This field is used to record any general information about the site not previously recorded in other fields.

Table 15 SITE_NAMES

tus_cd	FNO	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_id	FNO	Each recorded Traditional Use Site must be assigned a unique local identification number. A newly assigned identification number should include a positive integer value, and should not already be used in the database into which the site will be inserted.
tus_name_type_cd	FNO	Indicates the type of site name (Indigenous Name, Anglicized Name, or Alternate Name, Common Name)
site_name	FNO	The site name. May need special characters if it is an indigenous name.
name_translation	FNO	Used when the alternate name type is Indigenous Name. In those cases this field contains the name translation.

Table 16 SOURCE_MAPS

tus_cd	PRM	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_id	PRM	Each recorded Traditional Use Site must be assigned a unique local identification number. A newly assigned identification number should include a positive integer value, and should not already be used in the database into which the site will be inserted.
map_series_name	PRM	Identifies the map series. (e.g. BCGS, NTS, PBDA, CHS)
map_scale	PRM	Identifies the scale of the map.
map_id	PRM	Identifies the map sheet or reference number.
datum	PRM	Indicates the datum of the map being referenced.
paper_source_ind	PRM	Indicates hard copy map that was used as the final paper source for transferring site information from interviews. A yes or no answer is required.
digital_source_ind	PRM	For digital projects indicates that this map was used as a digital base. This will allow verification of features that follow planimetric features. Unless an exception has been granted this should be a PBDA (Provincial Baseline Digital Atlas) mapsheet. (e.g. 92H)

Note: If a map entry is added to this table it must be identified as either a Paper Source or Digital Source. Since either a paper map source or a digital map base is required to complete any TUS, this data is deemed mandatory.

For Digital projects each site should have two map references, one which indicates the hard copy map which was used to identify sites in the interview process (*paper_source_ind*), and a reference for the digital map sheet used for the digitizing of the feature (*digital_source_ind*).

Table 17 SITE_USES

tus_cd	PRM	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_id	PRM	Each recorded Traditional Use Site must be assigned a unique local identification number. A newly assigned identification number should include a positive integer value, and should not already be used in the database into which the site will be inserted.
site_use_cd	FNM	Defines the specific traditional uses/activities that took place at the site. The code will group similar activities together. (E.g. collecting cowparsnip would go in the same site use code as collecting camus - Plant Source - Food.) See Appendix D for a complete code listing. If the site use is deemed confidential then a code of AOR (available on request) can be submitted.
start_date	FNO	The start date for which the site was used for the specific purpose. If unknown enter 9999-01-01. To indicate 'time immemorial' use 0001-01-01.
end_date	FNO	The end date for which the site was used for the specific purpose. If unknown enter 9999-01-01.

First Nations must keep the site use information on file. If desired, an 'available on request code' can be provided with the submission.

Table 18 ORAL_REFERENCES

oralhis_id	PRM	Surrogate key to uniquely identify a record (generated by MS Access).
tus_cd	PRM	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_id	PRM	Each recorded Traditional Use Site must be assigned a unique local identification number. A newly assigned identification number should include a positive integer value, and should not already be used in the database into which the site will be inserted.
tape_id	PRO	This can be whatever the First Nation uses to identify a particular audio tape.
tape_side	PRO	Indicates the side of the tape. Either A or B.
tape_counter	PRO	The counter value at which the historical information can be found.
video_id	PRO	This can be whatever the First Nation uses to identify a particular video tape.
video_counter	PRO	The video tape counter value at which the historical information can be found.
advisor_name	PRM	The name of the individual, or group, from whom the information was attained. A number or reference indicator may be submitted if this information is deemed sensitive.
information_date	PRM	The date the information was attained.
historical_info	FNM	This field contains comments, stories, or anecdotes about the Traditional Use site.

Table 19 SITE_DESCRIPTIONS

sitedes_id	FNO	Surrogate key to uniquely identify a record (generated by MS Access).
tus_cd	FNO	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_id	FNO	Each recorded Traditional Use Site must be assigned a unique local identification number. A newly assigned identification number should include a positive integer value, and should not already be used in the database into which the site will be inserted.
site_description	FNO	Describes the traditional use site and may include descriptions of the surrounding landscape, its appearance, layout, organization, and condition. May also include instructions on how to find the site. (E.g. road runs parallel to petroglyph site and construction damaged last petroglyph in the panel to the north.)

Table 20 LINGUISTIC_AFFILIATIONS

tus_cd	PRO	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
spoken_language	PRO	This field indicates the Linguistic Affiliation, or the name of the spoken language of the culture associated with a study area. Examples: Salishan, Athapaskan, Haida, Shuswap.

Table 21 COMMITMENTS

com_id	PRO	Surrogate key to uniquely identify a record (generated by MS Access).
tus_cd	PRO	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_id	PRO	Each recorded Traditional Use Site must be assigned a unique local identification number. A newly assigned identification number should include a positive integer value, and should not already be used in the database into which the site will be inserted.
commitment_description	PRO	This field is used to indicate any commitments (already in existence) for the protection of the site, which do not involve legal statutes. (Example: Letter of commitment from the property owner.)

Table 22 SOCIAL_ORGANIZATIONS

tus_cd	FNO	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_id	FNO	Each recorded Traditional Use Site must be assigned a unique local identification number. A newly assigned identification number should include a positive integer value, and should not already be used in the database into which the site will be inserted.
organization_type_code	FNO	Identifies social organization type of the people who have traditionally used the site. (E.g. Clan) See Appendix D for a complete code listing.
organization_name	FNO	Indicates the actual name of the social organization. (E.g. Fireweed)

Table 23 WRITTEN_REFERENCES

siteref_id	PRM	Surrogate key to uniquely identify a record (generated by MS Access).
tus_cd	PRM	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
tus_id	PRM	Each recorded Traditional Use Site must be assigned a unique local identification number. A newly assigned identification number should include a positive integer value, and should not already be used in the database into which the site will be inserted.
reference_name	PRM	The name of the individual, group or source of the reference.
reference_type_cd	PRM	Defines if the references is from a published, unpublished (source is a written reference that has not been published) or inventory source (source is an existing inventory source such as a previous CMT inventory). See Appendix D for a complete code listing.
reference_title	PRM	The title of the reference if applicable.
reference_date	PRO	The date the reference was made or published.

(*Mandatory if they exist, there should only be one name/group for written_refs/ref_name per field)

Table 24 CONTACTS

contact_id	PRO	Surrogate key to uniquely identify a record (generated by MS Access).
tus_cd	PRO	4 or 5 letter code Assigned by Ministry of Forests Aboriginal Affairs Branch.
contact_type_cd	PRO	The type of contact. (e.g. local inventory coordinator, site recorder)
last_name	PRO	Last name of the individual.
name	PRO	First name of the individual or name of the group.
street_address	PRO	Street address of the contact.
city	PRO	City
province	PRO	Province of residence.
country	PRO	Country
postal_code	PRO	Postal Code
phone_number	PRO	Phone number of the contact.



*Information Kept by First Nation
Complete One Form per TUS Site*

Local Identification Number (TUS ID) AR 3

Site Use Code	Site Used From Date	Site Used To Date
AR 20	AR 21	AR 22

[illegible]



TRADITIONAL USE STUDY

Detailed Site Information Form

Information Kept by First Nation
Complete One Form per TUS Site

Site Name(s) (Enter as many as apply - use additional sheets if necessary)

Name Type AR 11	Site Name AR 12	Translation (if Indigenous Name) AR 13
<input type="checkbox"/> Indigenous Name <input type="checkbox"/> Anglicized Name <input type="checkbox"/> Alternate Name <input type="checkbox"/> Common Name		
<input type="checkbox"/> Indigenous Name <input type="checkbox"/> Anglicized Name <input type="checkbox"/> Alternate Name <input type="checkbox"/> Common Name		
<input type="checkbox"/> Indigenous Name <input type="checkbox"/> Anglicized Name <input type="checkbox"/> Alternate Name <input type="checkbox"/> Common Name		

Social Organizations (Enter as many as apply - use additional sheets if necessary)

Organization 1

Name of Organization :	AR 33			
Organization Type Code	AR 32			
<input type="checkbox"/> CLAN	<input type="checkbox"/> HOUSE	<input type="checkbox"/> TERRITORY	<input type="checkbox"/> TRIBE	
<input type="checkbox"/> BAND	<input type="checkbox"/> MOIETY	<input type="checkbox"/> PHRATRY		
<input type="checkbox"/> Other (Please Specify):	_____			

Organization 2

Name of Organization :	AR 33			
Organization Type Code	AR 32			
<input type="checkbox"/> CLAN	<input type="checkbox"/> HOUSE	<input type="checkbox"/> TERRITORY	<input type="checkbox"/> TRIBE	
<input type="checkbox"/> BAND	<input type="checkbox"/> MOIETY	<input type="checkbox"/> PHRATRY		
<input type="checkbox"/> Other (Please Specify):	_____			

Organization 3

Name of Organization :	AR 33			
Organization Type Code	AR 32			
<input type="checkbox"/> CLAN	<input type="checkbox"/> HOUSE	<input type="checkbox"/> TERRITORY	<input type="checkbox"/> TRIBE	
<input type="checkbox"/> BAND	<input type="checkbox"/> MOIETY	<input type="checkbox"/> PHRATRY		
<input type="checkbox"/> Other (Please Specify):	_____			

Figure 3 - Detailed Site Information Form Page 2



TRADITIONAL USE STUDY

Detailed Site Information Form

**Information Kept by First Nation
Complete One Form per TUS Site**

Oral References

Cultural Advisor Name	Date	Tape Reference #	Side (A/B)	Tape Counter
AR 23	AR 24	AR 25	AR 26	AR 27

Historical Information (can include anything about the site significant enough to record. E.g. History, detailed use info, legends anecdotes etc.)

AR 28

Figure 4 - Detailed Site Information Form Page 3

Information Kept by First Nation
Complete One Form per TUS Site

AR 10

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



TRADITIONAL USE STUDY Site Form

Required Submission to Province
Complete One Form per TUS Site

TUS Site

Local Identification Number (TUS ID) AR 3

Site Type Code AR 4			
<input type="checkbox"/> Polygon	<input type="checkbox"/> Linear	<input type="checkbox"/> Point	<input type="checkbox"/> Complex

Digitized Location AR 7	<input type="checkbox"/> Yes <input type="checkbox"/> No	Datum Value AR 8	<input type="checkbox"/> NAD 83 <input type="checkbox"/> NAD 27
-------------------------	--	------------------	---

Capture Method Code AR 9	
<input type="checkbox"/> GPS	<input type="checkbox"/> Survey <input type="checkbox"/> Estimated

Source Map References (Enter as many as apply - use additional sheets if necessary)

Map Series Name	Map ID	Map Scale	Datum AR 17	Map Use Purpose
AR 14	AR 16	AR 15	<input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83	<input type="checkbox"/> Digital Source AR 19 <input type="checkbox"/> Paper Source AR 18
			<input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83	<input type="checkbox"/> Digital Source <input type="checkbox"/> Paper Source
			<input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83	<input type="checkbox"/> Digital Source <input type="checkbox"/> Paper Source
			<input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83	<input type="checkbox"/> Digital Source <input type="checkbox"/> Paper Source
			<input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83	<input type="checkbox"/> Digital Source <input type="checkbox"/> Paper Source

TUS Site Location (must be provided if manual maps are submitted)

Latitude AR 5 Longitude AR 6

Site Use (*Must select either available on request or provide site use code)

☐ Available on Request

or

Site Use Code(s) (Enter as many as apply)

Site Use Code	Site Used From Date	Site Used To Date
AR 20	AR 21	AR 22

Figure 6 - Site Form Page 1



TRADITIONAL USE STUDY Site Form

***Required Submission to Province
Complete One Form per TUS Site***

Commitments

Commitment AR 31
Description

Oral References (Enter as many as apply - use additional sheets if necessary)

Cultural Advisor Name	Date	Tape Reference #	Side (A/B)	Tape Counter or Written Notes File #
AR 23	AR 24	AR 25	AR 26	AR 27

Written References (Enter as many as apply - use additional sheets if necessary)

Reference Type Code AR 34	Reference Name AR 35	Reference Date AR 36	Reference Title AR 37
<input type="checkbox"/> Published <input type="checkbox"/> Unpublished <input type="checkbox"/> Inventory			
<input type="checkbox"/> Published <input type="checkbox"/> Unpublished <input type="checkbox"/> Inventory			
<input type="checkbox"/> Published <input type="checkbox"/> Unpublished <input type="checkbox"/> Inventory			

Figure 7 - Site Form Page 2



TRADITIONAL USE STUDY Summary Form

*Required Submission to Province
Complete Once For Whole Study*

Traditional Use Study Area

TUS CODE AR 1 Database
Submission Date: _____

TUS Name AR 2

Linguistic Affiliations (Enter as many as apply)

Spoken Language AR 30

Spoken Language _____

Spoken Language _____

Spoken Language _____

Spoken Language _____

Contacts (Enter as many as apply)

Contact 1

☐ Lands and Resources Manager ☐ Chief ☐ Other (Specify) _____
☐ Councilor ☐ Referrals Manager
☐ Natural Resource Manager ☐ Cultural Heritage Manager
☐ Treaty Manager ☐ Cultural Liaison AR 38

Last Name AR 40 First Name AR 39

Street Address AR 41

Province AR 42 Postal Code AR 44

Country AR 43 Phone Number AR 45

Figure 8 - Summary Form Page 1



TRADITIONAL USE STUDY Summary Form

*Required Submission to Province
Complete Once For Whole Study*

Contact 2

- | | | |
|--|--|---|
| <input type="checkbox"/> Lands and Resources Manager | <input type="checkbox"/> Chief | <input type="checkbox"/> Other (<i>Specify</i>) |
| <input type="checkbox"/> Councilor | <input type="checkbox"/> Referrals Manager | |
| <input type="checkbox"/> Natural Resource Manager | <input type="checkbox"/> Cultural Heritage Manager | |
| <input type="checkbox"/> Treaty Manager | <input type="checkbox"/> Cultural Liaison | |

Last Name _____ First Name _____

Street Address _____

Province _____ Postal Code _____

Country _____ Phone Number _____

Contact 3

- | | | |
|--|--|---|
| <input type="checkbox"/> Lands and Resources Manager | <input type="checkbox"/> Chief | <input type="checkbox"/> Other (<i>Specify</i>) |
| <input type="checkbox"/> Councilor | <input type="checkbox"/> Referrals Manager | |
| <input type="checkbox"/> Natural Resource Manager | <input type="checkbox"/> Cultural Heritage Manager | |
| <input type="checkbox"/> Treaty Manager | <input type="checkbox"/> Cultural Liaison | |

Last Name _____ First Name _____

Street Address _____

Province _____ Postal Code _____

Country _____ Phone Number _____

Contact 4

- | | | |
|--|--|---|
| <input type="checkbox"/> Lands and Resources Manager | <input type="checkbox"/> Chief | <input type="checkbox"/> Other (<i>Specify</i>) |
| <input type="checkbox"/> Councilor | <input type="checkbox"/> Referrals Manager | |
| <input type="checkbox"/> Natural Resource Manager | <input type="checkbox"/> Cultural Heritage Manager | |
| <input type="checkbox"/> Treaty Manager | <input type="checkbox"/> Cultural Liaison | |

Last Name _____ First Name _____

Street Address _____

Province _____ Postal Code _____

Country _____ Phone Number _____

Page 2 of 2

Figure 9 - Summary Form Page 2

Appendix C – Entity Relationship Diagram

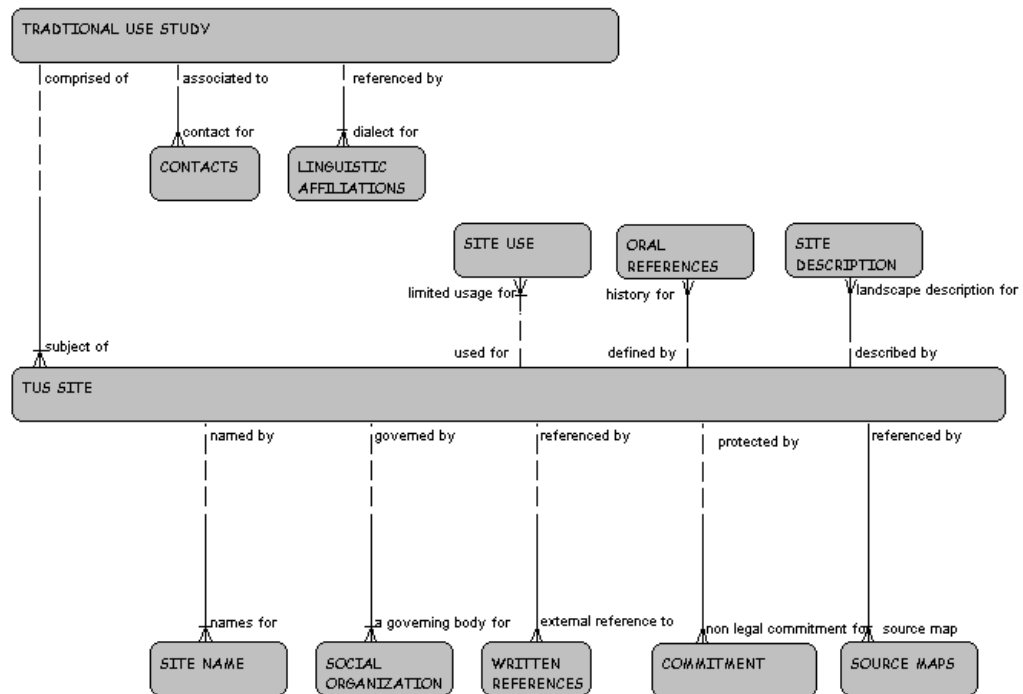


Figure 10 - TUS - Entity Relationship Diagram

Appendix D - Attribute Definitions

KEY TO TRADITIONAL USE SITE INVENTORY ATTRIBUTES

Traditional Use Study Area

1. TUS Code

Unique 5 letter identification number assigned to the whole Traditional Use Study area by the Ministry of Forests Aboriginal Affairs Branch. Your TU Project Officer will provide this code.

2. TUS Name

The name or description of a Traditional Use Study area. (E.g. Sechelt Traditional Use Study)

TUS Site

3. TUS ID

The TUS ID is also referred to as the local identification number. This field must be a unique number used to identify a single TUS site. Only positive integer values can be used as a TUS ID.

4. Site Type Code

Represents the type of traditional use site present, either Polygon, Line, Point, or Complex. The Complex code is used where a site consists of both polygon and linear features. (E.g. a fishing site that follows a branching river.) See Appendix D for a complete code listing.

5. Latitude

The traditional use site's latitude entered in the format DDD MM SS (Degrees, Minutes, Seconds) expressed numerically. This is required for non-digital map projects only.

6. Longitude

The traditional use site's longitude entered in the format DDD MM SS (Degrees, Minutes, Seconds) expressed numerically. This is required for non-digital map projects only.

7. Digitized Location

Indicates if the traditional use site has been digitized for use on a geographic information system (GIS).

TUS Data Capture Specifications

8. Datum Value

Identifies either NAD 27 or NAD 83 as the datum value used for digitized and/or hard copy mapped sites.

9. Capture Method Code

Indicates the method used to establish the location of the traditional use site. Values include GPS, Survey or estimated (estimated for those sites that could not be verified on the ground) See Appendix D for a complete code listing.

10. Site Comments

Any significant information about the traditional use site not previously recorded in other fields. (E.g. where cross reference of oral or written references cannot eliminate potential discrepancy, location clarifications, etc.)

Site Names

11. Alternate Name Type Code

Indicates whether the name of the traditional use site is Indigenous, Anglicized, an Alternate or Common name. See Appendix D for a complete code listing.

12. Site Name

The name of the traditional use site. The site name may require special characters if it is an indigenous name.

13. Name Translation

The translation of an indigenous traditional use site name into English.

Source Map References

14. Map Series Name

Identifies the map series of the map being referenced. (E.g. Provincial Baseline Digital Atlas, NTS(National Topographic Series)).

15. Map ID

Identifies the map sheet or reference number of the map being referenced. (E.g. 82E037 for 1:20,000 TRIM Series, 82E for 1:250,000, and 92C/15 for 1:50,000. Do not put spaces in any of the Map ID names.

16. Map Scale

Scale of the map being referenced. (e.g. 1:20,000; 1:50,000)

17. Datum

The datum of the map being referenced. For TUS projects the datum should be either NAD 27 or NAD 83.

18. Paper Source

Indicates hard copy map that was used as the final paper source for transferring site information from interviews. A yes or no answer is required.

19. Digital Source

For digital projects indicates that this map was used as a digital base. This will allow verification of features that follow planimetric features. Unless an exception has been granted this should be a PBDA (Provincial Baseline Digital Atlas) mapsheet. (e.g. 92H)

Site Use

20. Site Use Code

*Defines the specific traditional uses/activities that took place at the site. The code will group similar activities together (E.g. collecting cowparsnip would go in the same site use code as collecting camus - **Plant Source - Food.**). See Appendix D for a complete code listing.*

21. From Date

The start date for which the site was used for the specific purpose (if known).

22. To Date

The last known date for which the site was used for the specific purpose (if known).

Oral References

23. Cultural Advisor Name

The name of the individual, or group, from whom the information was attained. A number or reference indicator may be submitted if this information is deemed sensitive. (a defined list must be kept by the First Nation).

24. Information Date

The date the information was attained.

25. Tape Reference Number

This can be whatever the First Nation uses to identify a particular tape.

26. Tape Side

Indicates the side of the tape. Either A or B.

27. Tape Counter

The tape counter value at which the historical information is recorded on the tape.

28. Historical Information

Includes written comments, stories, or anecdotes about the traditional use site.

Site Descriptions

29. Site Description

Describes the traditional use site and may include descriptions of the surrounding landscape, its appearance, layout, organization, and condition. May also include instructions on how to find the site. (E.g. road runs parallel to petroglyph site and construction damaged last petroglyph in the panel to the north.)

Linguistic Affiliations

30. Spoken Language

Indicates the linguistic affiliation or the name of the spoken language of the culture associated with a traditional use study area (E.g. Salishan, Athapaskan, Haida, Shuswap.).

Commitments

31. Commitment Description

Indicates any existing commitments for the protection of the traditional use site that do not involve legal statutes. (E.g. letter of commitment from the property owner)

Social Organizations

32. Organization Type Code

Identifies the social organization type of the people who have traditionally used the site. (E.g. Clan) See Appendix D for a complete code listing.

33. Organization Name

Indicates the name of the social organization who have traditionally used the site. (E.g. Fireweed)

Written References

34. Reference Type Code

Defines if the references is from a published, unpublished or inventory source. See Appendix D for a complete code listing.

35. Reference Name

The name of the individual, group or source of the reference. There should only be one name/group.

36. Reference Date

The date the reference was made or published.

37. Reference Title

The title of the reference if applicable.

Contacts

38. Contact Type Code

Identifies the type of contact. (e.g. Local inventory coordinator, Site Recorder etc.) See Appendix

39. Name

First name, title or name of the organization being referenced.

40. Last Name

Last name of the contact if a person.

41. Street Address

Street address of the contact.

42. Province

Province of residence of the contact.

43. Country

Country of residence of the contact.

44. Postal Code

Postal code of the contact.

45. Phone Number

Phone number of the contact.

Appendix E - Code Values

Table 25 - Site Type Codes

Code	Description
POINT	Point Site
LINE	Linear Site
POLYGON	Polygonal Site
COMPLEX	Combination of Linear and Polygon

Table 26 - Capture Method Codes

Code	Description
GPS	Global Positioning System
SURVEY	Field Survey
ESTIMATED	Estimated from hard copy

Table 27 - Land Type Codes

Code	Description
P	Private
C	Crown Land
R	Reserve Land
O	Other
U	Unknown

Table 28 - Name Type Codes

Code	Description
IN	Indigenous Name.
IR	"Anglicized" Indigenous Name
AN	Alternate Name
CN	Common Name

Table 29 - Site Use Codes

Site Use Code	Description
ALAR	aboriginal logging area
ANDRIVEAR	animal drive area
ANWOOLSITE	animal wool/hair gathering site
AQAR	aboriginal quarry area
ARB	arborglyphs
ARMSCACHE	arms cache
BA	bathing area
BAITSRC	bait source
BARKSRC	bark source

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BCCAIRN	burial cave cairn / marker
BERSRC	berry source
BLINDSITE	blind site
BRTHSITE	birthing hut / site
BTLSITE	battle site
CACHEPIT	cache pit
CAMPSEA	camp - seasonal
CAMPTRAN	camp - transient
CANOEPORT	canoe portage
CANOEROUTE	canoe route
CARBFENCE	caribou fence
CAVEBURIAL	cave - burial
CAVERITUAL	cave - ritual
CAVESHELT	cave - shelter
CERMSITE	ceremonial site
COMMSITE	communication site
CULTLAND	cultural landform / landmark
DENSRC	dentalia source
DWELL	dwelling
EGGSITE	egg gathering site
FISHAREA	fishing area / weir
FISHSTN	fishing station
FOODPRSITE	food processing site
FOWLSRC	waterfowl source
GAMINGSITE	gaming site
GRASSRC	grass source
GRAVE	grave house / trees / mortuary pole
HEALINGARA	healing area
HIDEOUT	hideout
HUNTAREA	hunting area
INTERTRAP	intertidal trap
LAUNDRYARA	laundry area
LEGENDSITE	legend site
LOOKOUT	lookout
MANUFSITE	manufacture site
MARINEHUNT	marine mammal hunting area
MARINEPLAN	marine plant source
MARRIAGERT	marriage retreat
MEETING	meeting place
MOSSSRC	moss source
NAMEDPLC	named place
NAVIGPNT	navigational point
NETTINGSTN	netting station
PETROGLYPH	petroglyph
PICTOGRAPH	pictograph
PLACDISSIT	placenta disposal site
PLSRCCER	plant source - ceremonial

PLSRCFOOD	plant source - food
PLSRCMED	plant source - medicine
PLSRCTECH	plant source - technology
PUBLGE	puberty lodge
RECSITE	recreation site
REFUSESITE	refuse site
REGALIAREP	regalia repository
ROCKCAIRN	rock cairn
ROESRC	roe source
ROOTSRC	root source
SEAWEEDSRC	seaweed source
SHELLSRC	shellfish source
SHELTER	shelter
SKIDSITE	skid site
SKILLSITE	skill competition / trial / ordeal site
SNAILGAR	amphibian and snails gathering areas
SPIRPOOL	spiritual bathing pool
SPIRSITE	spiritual site
SUMMERVILL	village - summer
SUPERNSITE	supernatural being site
SWEATHOUSE	sweat house
TEACHSITE	teaching site
THERHOTSPS	therapeutic hot springs
TRADEAREA	trading area
TRAIL	trail
TRAPCAB	trapping cabin
TRAPLINE	trapline
TRAPSITE	trap site
VISIONQST	vision quest area
WHALESRHIN	whaler shrine
WINTERVILL	village - winter
WOODSRC	wood source
Site Use Code	Description

Table 30 - Reference Type Codes

Code	Description
PUBLISHED	Published
UNPUBLISHED	Unpublished
INVENTORY	Inventory

Table 31 - Organization Type Codes

Code	Description
CLAN	Clan
EXTENDED	Extended family
HOUSE	House
TERRITORY	Territory

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BAND	Band
NUCLEAR	Nuclear family
MOIETY	Moiety
PHRATRY	Phratry
TRIBCOUN	Tribal Council

Table 32 - Contact Type Codes

Code	Description
LRM	Lands and Resources Manager
CHIEF	Chief
COUN	Councilor
RM	Referrals manager
NRM	Natural Resources Manager
CHM	Cultural Heritage Manager
TM	Treaty Manager
CL	Cultural Liaison

Appendix F - Products Available from Project Officers

1. NAD 27 and NAD 83 grids for BCGS 1:20,000 and NTS 1:50,000.
2. 1:250,000 NAD 83 base maps and contours.
3. Sample map for manual projects.
4. Sample map plot for digital projects.
5. Sample MS Access database.
6. Sample IGDS File.
7. Sample Shape Files.
8. Ministry of Forests, GPS Data Capture Standards.
9. Digital Site Forms. Note these must not be filled out in MS Word. They are only for printing purposes.