MINISTRY OF FORESTS AND RANGE

RESULTS
BUSINESS VIEW
OVERVIEW

BRITISH COLUMBIA
The Best Place on Earth

Version 1

November 29, 2008

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1. RESULTS Business Views

As of November 2008, eight new RESULTS views will be available through the LRDW. These views can be accessed by any "idir" or "bceid" users. These views can be downloaded through the Data Distribution Service located at: http://aardvark.gov.bc.ca/apps/dwds/home.so

1.1 Outline of RESULTS Views

The following is a brief description of the new views. Detailed information on each of the views and any special consideration is located in Section 5.

BUSINESS VIEW	DESCRIPTION
RSLT_OPENING_SVW	Spatial representation for an opening, which is an administration boundary representing an area that has been harvested or disturbed where there are forest management activities. Includes the opening spatial shape, if it exists.
RSLT_OPENING_VW	This view is intended to be joined with other RESULTS view, providing additional metadata to standards units, activities and forest cover data.
RSLT_STANDARDS_UNIT_SVW	Spatial representation for a stocking standards unit, which is a basic silviculture objective stated in quantifiable terms for a specific area. These are acceptable standards for reforestation and soil conservation. Also known as SU – standards unit. Includes the SU spatial shape, if it exists.
RSLT_ACTIVITY_TREATMENT_SVW	Spatial representation of opening's disturbance and silviculture activities reported into RESULTS. Includes the activity spatial shape, if it exists.

BUSINESS VIEW	DESCRIPTION
RSLT_PLANTING_SVW	Spatial representation for a planting activity. Includes the planting spatial shape, if it exists.
RSLT_FOREST_COVER_INV_SVW	Spatial representation of the opening's forest cover attributes. The attributes have been de-normalized and are limited to the inventory attribution of the forest cover polygons. Includes the forest cover polygon spatial shape, if it exists.
RSLT_FOREST_COVER_SILV_SVW	Spatial representation of the opening's forest cover attributes. The attributes have been de-normalized and are limited to the silviculture attribution of the forest cover polygons. Includes the forest cover polygon spatial shape, if it exists.
RSLT_FOREST_COVER_SPECIES_VW	Tree species contained within RESULTS's inventory and silviculture components. This is attribute tree species information should users require full details of tree species composition since the RSLT_FOREST_COVER_INV & RSLT_FOREST_COVER_SILV views show only the first five species.

BUSINESS VIEW	DESCRIPTION
RSLT_FOREST_COVER_RESERVE_SVW*	Spatial representation of retention area associated with a silvicultural system. Reserves are forest patches or individual trees during harvesting, or other forestry operations to provide habitat, scenic, biodiversity or other values. The reserve types included are Riparian, Wildlife Tree Patches and Other. Includes only those forest cover polygons with spatial information that have reserve type codes of : "R","W" or "O".

* This is not a new view developed under BVI project but is included to offer complete review of all RESULTS views.

2. Scope of RESULTS

RESULTS (Reporting Silviculture Updates and Land Status Tracking System) tracks disturbance and silviculture information for managed Crown Land.

- areas harvested by licensees where there are reforestation obligations;
- pre-1987/88 (backlog) harvested areas;
- areas disturbed by fire and pest;
- areas harvested under small scale salvage; and
- treatments that required reporting as required by policy.

2.1 Major Licensee & BCTS

Reporting by major licensees & BC Timber Sales occurs once a year for cutblock/openings:

- where harvesting is complete, regeneration is achieved, and at free growing.

Information provided includes:
- a forest cover submission with a map;
- definition of the standards units with stocking standards & biogeoclimatic ecosystem (BEC) description;
- disturbance report where harvesting is complete;,
- silviculture treatments; and,
- milestone declarations.

Reporting is submitted by May 31 each year for April 1 to March 31 of the preceding year. While the legislation requires reporting once a year, licensees are able to report and update their RESULTS information at anytime.

2.2 Woodlots

Reporting for woodlot includes:
- new cutblock/openings
- definition of the standards units with stocking standards & biogeoclimatic ecosystem (BEC) description;
- upon harvest completion and at free growing – forest cover submission with map;
- silviculture treatments; and,
- milestone declarations.

Reporting is submitted by April 30 each year for any activities carried out between January 1 to December 31. While the legislation requires reporting once a year, licensees are able to report and update their RESULTS information at anytime.

2.3 Government Responsible Areas

Reporting for government responsible areas is guided by policy. They may include:
- creation of new opening for natural disturbance areas that are going to be actively managed;
- reporting of any disturbance and silviculture treatments conducted on government responsible areas;
- updating of forest cover information with map; and,
- milestone declaration.

3. Current Opening Data Requirements

Any <u>new</u> openings reported into RESULTS contains the following key pieces of information

Component	Attribute	Spatial Map
Opening Definition Standard Unit	Yes	Yes
Disturbance (Activity)	Yes	No
Silviculture Treatments (Activity)	Yes	No[1]
Forest Cover	Yes	Yes
Declarations	Optional[2]	No

[1] map required for aerial fertilization application and historical Monosodium Methanearsenate (MSMA) treatments.

[2] required for woodlots

4. Historical Context on RESULTS Spatial Data

4.1 Opening Spatial Information

RESULTS is the genesis of pre-existing reforestation information systems. Prior to RESULTS, silviculture forest cover paper maps were given to vegetation inventory for incorporation into vegetation inventory coverage. When RESULTS was created, all historical silviculture database attribute records were converted over but it did not contain any spatial data.

An initial attempt to populate Opening spatial records using Vegetation Inventory files occurred. The conversion routine used the Mapsheet & Opening Numbers. Where the Mapsheet & Opening matched, the opening's forest cover polygons were merged to create an opening boundary that was copied to the RESULTS Opening's spatial layer. If the Mapsheet & Opening numbers did not match, no linework was created. This conversion effort created 111,500 openings spatial boundaries out of the original 186,000 openings or (58%). These converted records contain Entry/Update Userid with a "ROSC-AGENT" identifier. Note that any data quality concerns related to any "ROSC-AGENT" must be addressed within the Ministry as they are the creator of the opening linework.

Gaps in spatial conversion were caused by:
- no TFL spatial data existed in Ministrty's inventory coverage; or,
- differences in opening numbers used between RESULTS vs. inventory's files.

Appendix A provides context for level of spatial completeness.

4.2 Forest Cover Spatial Information

There were no attempts to convert forest cover spatial data. Any forest cover spatial data that exists in RESULTS is based on submissions provided by users. As of April 2007, RESULTS require mandatory spatial data for any forest cover ESF submission.

Appendix A provides context for level of spatial completeness.

4.3 Activity Spatial Information

RESULTS provides the ability for storing activity spatial data. While attribute reporting of disturbance and silviculture reporting is mandatory, spatial information is not required unless it is aerial fertilization application or historical Monosodium Methanearsenate (MSMA) treatment. Therefore anyone using the Activity spatial information should be aware that there will be spatial data gaps as the spatial portion of disturbance and silviculture reporting is optional.

Appendix A provides context for level of spatial completeness.

4.4 Mandatory Spatial Requirement

RESULTS became spatially enabled to accept any ESF submissions as of November 2003. All spatial must be submitted by ESF. However, the mandatory spatial rule become mandatory for specific Forest Tenure (major licensee, non-replaceable forest licences, BCTS) openings as of April 1, 2007.

5. Business View Details

5.1 RSLT_OPENING_SVW/RSLT_OPENING_VW

Description
The opening views provide a combination of key opening identifiers along with generalized biogeoclimatic ecosystem classification, disturbance and silviculture information.

Primary & Foreign Keys
OPENING_ID FOREST_FILE_ID CUTTING_PERMIT_ID TIMBER_MARK CUT_BLOCK_ID

Source Tables (Raw Data)
OPENING CUT_BLOCK_OPEN_ADMIN (FTA/FTEN) CUT_BLOCK_CLIENT (FTA/FTEN) FOREST_FILE_CLIENT (FTA/FTEN) PROV_FOREST_USE (FTA/FTEN) FOREST_CLIENT (Client) ACTIVITY_TREATMENT_UNIT STOCKING_STANDARD_UNIT STOCKING_ECOLOGY ORG_UNIT OPENING_GEOMETRY

Data Relationships & Idiosyncrasies
One row/record represents one opening
Tenure information (ie. FOREST_FILE_ID, CUTTING_PERMIT_ID, TIMBER_MARK, CUT_BLOCK_ID, FILE_TYPE_CODE) only exists for those harvested openings.
Tenure information is based on the prime licence identified for the opening.
MGMT_UNIT_ID, MGMT_UNIT_TYPE_CODE, MGMT_UNIT_DESCRIPTION is obtained through tenure information. If the opening does not have associated tenure, then these fields will be blank and must be obtained via a secondary process.
Disturbance and silviculture activities are generalized based on the first or second listed. There is a count available to indicate if there is more activities than what is listed. When there is more than one activity (count) identified for either disturbance or silviculture activities, care must be taken in using the summed areas as they may exceed more than the opening's gross area.
Biogeoclimatic ecosystem information is generalized based on the standards unit with the largest net area to be reforested associated with the opening; if net area to be reforested is the same, the first is used. If more detailed biogeoclimatic information is required, this can be accessed through RSLT_STANDARDS_UNIT_SVW.
GEOMETRY_EXISTS_IND - this field is checked "N" if there is missing opening spatial geometry.
RSLT_OPENING_VW contains the same information as RSLT_OPENING_SVW minus the spatial metadata and geometry.

5.2 RSLT_STANDARDS_UNIT_SVW

Description
The standards unit view contains SU identifier, associated milestone information (eg. Regeneration and Free Growing due, declared & received dates), stocking standard information, and biogeoclimatic ecosystem classification.
Primary & Foreign Keys
OPENING_ID STOCKING_STANDARD_UNIT_ID STANDARD_REGIME_ID
Source Tables (Raw Data)
OPENING STOCKING_STANDARD STOCKING_LAYER STOCKING_LAYER_SPECIES STOCKING_ECOLOGY V_STOCKING_MILESTONE STOCKING_STANDARD_GEOMETRY
Data Relationships & Idiosyncrasies
One row represents one standards unit.
An opening may have one or more standards units.
The View has columns for even-aged stocking standards vs. uneven-aged stocking standards (up to 4 layers).
STANDARDS_UNIT_TYPE identifies whether the standards unit contain "EVEN", "UNEVEN" age stocking standards or "UNKNOWN" or "NONE". Even-aged stocking standards will have prefix of I. Uneven-aged stocking standards, they will have prefix of : I1 =　　Mature I2 =　　Pole I3 =　　Sapling I4 =　　Regen
Can be joined to RSLT_OPENING_VW to obtain other associated identifier attribute information via OPENING_ID.
- Silviculture Prescription Standards Units do not have of STANDARD_REGIME_ID and have APPROVAL_DATE >= 1987-01-01 (Major Licensees) or >=1988-01-01 (BCTS) and <= 2002-12-17. Silviculture Prescription amendment requires DM's approval. - Woodlot's SUs have site plans not tied to an APPROVAL_DATE. - Site Plans have STANDARD_REGIME_ID. Site Plan amendments do not require DM's approval.
All openings with reforestation obligations must have at least one standards unit.
Declarations are optional.
Standards Unit spatial exists for openings that have been created since RESULTS's inception.
GEOMETRY_EXISTS_IND - this field is checked "N" if there is missing spatial standards unit geometry.

5.3 RSLT_ACTIVITY_TREATMENT_SVW

Description
The Activity Treatment view contains disturbance and silviculture activities reported for openings. Silviculture activities consist of either planned or completed activites. Activity spatial information is not mandatory.

Primary & Foreign Keys
OPENING_ID
ACTIVITY_TREATMENT_UNIT_ID

Source Tables (Raw Data)
ACTIVITY_TREATMENT_UNIT
ACTIVITY_TREATMENT_GEOMETRY

Data Relationships & Idiosyncrasies
Contains completed disturbance activities.
Contains planned or completed silviculture activities.
One row represents one disturbance or silviculture activity for an opening.
There can be one or more disturbance or silviculture activities for the same opening.
Activities can overlap Standards Unit and Forest Cover Polygon boundaries.
Activity Areas may overlap within the same opening.
- Planned silviculture activity is identified as: ATU_COMPLETION_DATE IS NULL or RESULTS_IND = N. -Completed silviculture activity is identified as: ATU_COMPLETION_DATE IS NOT NULL or RESULTS_IND = Y.
Activities cannot be explicitly related to a specific Standards Units or Forest Cover Polygon. There is no direct linkage. Therefore if there is a need to relate this information, you must have specific rules to define this relationship.
Can be joined to RSLT_OPENING_VW to obtain other associated opening description attribute information.
Activity spatial information is not a legislative requirement and is optional. Exception is that policy requires maps for aerial fertilization application and historical Monosodium Methanearsenate (MSMA) treatment for beetle probing.
GEOMETRY_EXISTS_IND - this field is checked "N" if there is missing spatial activity geometry.

5.4 RSLT_PLANTING_SVW

Description
The Planting view contains completed planting activities with details of tree species planted. A planting activity may contain one or more planted species with lot and genetic information from SPAR. Planting spatial information is not mandatory.
Primary & Foreign Keys
OPENING_ID ACTIVITY_TREATMENT_UNIT_ID SEEDLOT_NUMBER (enable ties to SPAR) VEG_LOT_ID (enables ties to SPAR) ACTIVITY_TREATMENT_GEOMETRY
Source Tables (Raw Data)
ACTIVITY_TREATMENT_UNIT SEEDLOT PLANTING_RSLT ACTIVITY_TREATMENT_GEOMETRY
Data Relationships & Idiosyncrasies
One row represents one tree species planted for a given planting activity, for a given opening.
There can be one or more tree species planted for the same activity. If spatial exists and if there is more than one species for the activity, there will be a <u>stacking</u> of the geometry.
There can be one or more planting activities for the same opening.
Tree species are reported with the number of trees planted for the entire planting activity. Trees species are not reported by specific area by species. Therefore if you need to have trees planted by area some calculations have to be defined to infer planted species by area.
Activities can overlap Standards Unit and Forest Cover Polygon boundaries.
Activity Areas may overlap within the opening.
Can be joined to RSLT_OPENING_VW to obtain other associated opening description attribute information.
Can be joined to RSLT_ACTIVITY_TREATMENT_SVW to obtain detailed activity description attribute information.
Some SPAR data has been provided (eg. REQUEST SKEY, GENETIC CLASS CODE, SUPERIOR PROVIDENCE IND) via use of SEEDLOT_NUMBER & LOT_ID. More information can be obtained through linking to SPAR's tables.
Planting spatial information is not a legislative requirement and is optional.
GEOMETRY_EXISTS_IND - this field is checked "N" if there is missing spatial activity geometry.

5.5 RSLT_FOREST_COVER_INV_SVW & RSLT_FOREST_COVER_SILV_SVW

Description
The Inventory/Silviculture Forest Cover views contain total opening coverage based on forest cover polygon with attributes from the inventory/silviculture component.
Primary & Foreign Keys
OPENING_ID STOCKING_STANDARD_UNIT_ID FOREST_COVER_ID I_FOREST_COVER_LAYER_ID (Inventory View) S_FOREST_COVER_LAYER_ID (Silviculture View) FOREST_COVER_GEOMETRY
Source Tables (Raw Data)
OPENING_ID STOCKING_STANDARD_UNIT STOCKING_ECOLOGY FOREST_COVER FOREST_COVER_LAYER FOREST_COVER_SPECIES FOREST_COVER_GEOMETRY
Data Relationships & Idiosyncrasies
One row represents one forest cover polygon within the opening.
An opening will have an entire forest cover represented in either inventory or silviculture coverage. • Inventory will show all the forest cover polygons for a given opening with inventory attribution for those polygons that have inventory component. • Silviculture coverage will show all the forest cover polygons for a given opening with silviculture attribution for those polygons that have silviculture component.
There can be one or more forest cover polygon for an opening.
Forest cover polygon must not straddle multiple standards unit boundaries.
Some openings may not have any forest cover submissions: shell openings created for aerial fertilization application & and historical Monosodium Methanearsenate (MSMA) treatment for beetle probing
Any new openings or updated forest cover submissions will contain spatial information. There will be historical records where there is no spatial information available. Information will be attribute only.
Forest cover submissions will occur at three milestones for openings with silviculture obligations: at harvest completion, before regeneration due date and before late free growing due date.
Silviculture View contains a field called "IS_SILV_IMPLIED_IND". Forest cover submission allows for both inventory and silviculture label to be supplied as one (inventory) if there is no significant differences in the species composition based on survey methodology. In this instance, silviculture description is replicated from the inventory component. Indication of this would be where IS_SILV_IMPLIED_IND = Y.

RSLT_FOREST_COVER_INV_SVW &
RSLT_FOREST_COVER_SILV_SVW (cont.)

Data Relationships & Idiosyncrasies
Biogeoclimatic ecosystem (BEC) classification is based on the SU that has been assigned to the forest cover which is considered as a component of the net area to be reforested. Note that Forest Cover Polygon/SU link is a fairly recent mandatory data requirement. Therefore, there will be many records where the BEC cannot be determined. Default will be to use either the generalized BEC via OPENING_VW or some other method.
Both even-aged label and uneven-aged labels are represented as one row per forest cover polygon.

Layer assigns Even Aged or Uneven-aged based on existence of different layers.
    Inventory:
        Even: I
        Uneven: 1, 2, 3, 4
    Silviculture
        Even: S
        Uneven: 1S, 2S, 3S, 4S
 	
If a forest cover polygon does not contain any inventory or silviculture component – this will be assigned NONE.
 	
UNKNOWN is assigned if there is inconsistencies with forest cover layers and cannot be determined.

Only the first 5 species is provided in this view. If more than 5 species exists, MORE_SPECIES_EXIST_IND = Y and can be obtained via FOREST_COVER_SPECIES_VW.
Can be joined to RSLT_OPENING_VW to obtain other associated opening description attribute information.
Forest Cover view represents the most recently submitted forest cover.
Forest cover submissions submitted for openings with reforestation obligations in the following Opening Categories: FTML, FTSBF, FTFSM, FTLEVY after 2007-04-01 require spatial.
GEOMETRY_EXISTS_IND - this field is checked "N" if there is missing spatial activity geometry.

5.6 RSLT_FOREST_COVER_SPECIES_VW

Description
The Forest Cover Species View contains detailed information of all species provided for forest cover polygons. This layer contains attributes only and is intended to provide extra species not available in the inventory/silviculture views. Inventory and Silviculture views species are limited to 5

Primary & Foreign Keys
FOREST_COVER_ID FOREST_COVER_LAYER_ID

Source Tables (Raw Data)
FOREST_COVER_SPECIES

Data Relationships & Idiosyncrasies
One row represents one species for a given inventory/silviculture layer for a given forest cover polygon
Must join both FOREST_COVER_ID & FOREST_COVER_LAYER to acquire the right species for a given forest cover layer.
Species Order represents order of species percent. Species Order 1 represents the dominant species (highest species percent). Species Order 2 represents the second dominant species (second highest species percent, etc.
Current forest cover submission requirements require mandatory Average Height and Average Age for the dominant species.
Historical information may have no average height and age available.
This layer should only be used if MORE_SPECIES_EXIST_IND = Y to acquire more detailed species.

5.7 RSLT_FOREST_COVER_RESERVE_SVW*

Description
The spatial representation of retention area associated with a silvicultural system. Reserves are forest patches or individual trees retained during harvesting, or other forestry operations to provide habitat, scenic, biodiversity, and other values. The reserve types included are Riparian (R), Wildlife Tree Patches (W), and Other (O). This view is used by the ILRR for encumbrance reporting. Only those forest cover polygons with geometry are provided in this view.
Primary & Foreign Keys
OPENING_ID FOREST_FILE_ID CUTTING_PERMIT_ID CUT_BLOCK_ID SILV_POLYGON_NO (this is not a key, but allows ability to relate to RESULTS forest cover records).
Source Tables (Raw Data)
FOREST_COVER FOREST_COVER_GEOMETRY CUT_BLOCK_OPEN_ADMIN (FTEN)
Data Relationships & Idiosyncrasies
Only forest cover polygons with Reserve Type Codes of "W","R" or "O" with geometry are provided.
One opening may have one or more reserves.
Openings may have reserves with attribute only will not appear in this view. If all reserves (with no spatial information) are required, use RSLT_FOREST_COVER_INV_SVW
This view is derived from Forest Cover information. More reserve types can be obtained through RSLT_FOREST_COVER_INV_SVW

* this view was not modified under this BVI project and is included for documentation completeness of all current RESULTS business views.

6. RESULTS Data Governance

RESULTS contains a website is located at:
http://www.for.gov.bc.ca/his/results/

The main documents that guide submission into RESULTS are located in the *Business and Policy Documentation Link*.

- *RESULTS Information Submission Specifications – Licensee Submissions*
  http://www.for.gov.bc.ca/his/results/RISS_ls_3a_ed_Oct1.pdf

- *RESULTS Information Submission Specifications – Government Funded Silviculture Activities*
  http://www.for.gov.bc.ca/hfp/publications/00220/resultsSubmission.pdf

Note that these documents provide guidance on current data requirements.

RESULTS contain historical records dating back to the 1950's based on paper-files. Therefore, when using RESULTS information, users have to be mindful of changes in data requirements, data standards, and also legislative framework that guides what is collected at a given point in time. For the opening spatial, some of this information is supplied by the submitter, while a large proportion is due to RESULTS Opening Spatial Conversion initiative done back in October 2004 (eg. Entry/Update Userid "ROSC AGENT"). Other spatial layers (Standards Units, Activity, Forest Cover) are supplied by the submitter and are subject to requirements outlined in the submission specification at that particular point in time.

7. RESULTS Training Materials

Users unfamiliar with RESULTS may access Training Materials at:
http://www.for.gov.bc.ca/his/results/trainingMaterials.htm.

RESULTS Tutorial and Overview module may be a good starting point. Future Learnlinc/iLinc sessions on RESULTS Business Views will be offered within the next few months. Recordings of these sessions will be posted when they are complete for anyone to access.

8. RESULTS View – Short Names

In the development of these views, long names was retained to able full description of the attributes. Users who will access the above layers via the Data Distribution Service selecting for Shape file type will obtain 10 character short names.

Appendix A – RESULTS Spatial Data Completeness
RESULTS Opening & Forest Cover Spatial Data Completeness by Districts

Data source: RESULTS as of Sept 22, 2008

Region	District	Opening Poly	Forest Cover Poly	Opening & Forest Cover Poly	All Attribute	SP %	FC %	SP & FC%
RCO	DCK	3,294	1,460	3,983	5,808	57%	25%	69%
RCO	DCR	4,648	2,412	5,794	7,830	59%	31%	74%
RCO	DNC	1,278	510	1,449	1,709	75%	30%	85%
RCO	DNI	4,947	4,645	7,153	9,021	55%	51%	79%
RCO	DQC	1,004	979	1,602	2,183	46%	45%	73%
RCO	DSC	3,581	1,843	4,375	5,085	70%	36%	86%
RCO	DSI	2,288	2,034	3,493	4,762	48%	43%	73%
RCO	DSQ	3,153	967	3,531	3,875	81%	25%	91%
RNI	DFN	1,884	885	2,108	2,231	84%	40%	94%
RNI	DJA	2,926	2,183	3,920	4,908	60%	44%	80%
RNI	DKM	1,985	1,022	2,326	3,706	54%	28%	63%
RNI	DMK	4,269	1,264	4,661	5,545	77%	23%	84%
RNI	DND	9,405	6,588	11,143	13,347	70%	49%	83%
RNI	DPC	5,054	2,853	5,976	7,190	70%	40%	83%
RNI	DPG	8,740	5,026	10,500	12,627	69%	40%	83%
RNI	DSS	3,720	1,262	3,873	4,433	84%	28%	87%
RNI	DVA	4,504	4,261	5,761	6,864	66%	62%	84%
RSI	DAB	7,065	4,103	8,229	9,823	72%	42%	84%
RSI	DCC	7,771	4,849	9,677	12,494	62%	39%	77%
RSI	DCH	4,574	2,189	5,159	6,258	73%	35%	82%
RSI	DCO	3,619	1,720	4,109	4,836	75%	36%	85%
RSI	DCS	8,413	4,969	9,564	10,182	83%	49%	94%
RSI	DHW	2,666	2,640	3,989	7,736	34%	34%	52%
RSI	DKA	5,688	5,247	7,721	10,313	55%	51%	75%
RSI	DKL	4,342	1,545	4,578	4,854	89%	32%	94%
RSI	DMH	4,926	2,785	5,562	6,742	73%	41%	82%
RSI	DOS	12,593	6,136	14,961	19,176	66%	32%	78%
RSI	DQU	6,395	3,614	7,522	10,445	61%	35%	72%
RSI	DRM	10,571	4,935	11,562	12,792	83%	39%	90%
Total		145,303	84,926	174,281	216,775	67%	39%	80%

Opening Poly = number opening records with opening spatial coverage
Forest Cover Poly = number forest cover records with forest cover spatial coverage
Opening Poly & Forest Cover = number of opening <u>or</u> forest cover records with either opening <u>or</u> forest cover spatial coverage.

Example interpretation: DCK – Chilliwack had:
57% of its openings records with opening spatial coverage (3294/5808);
25% of its forest cover records with forest cover coverage (1460/5808).
69% of its opening <u>or</u> forest cover records with either opening <u>or</u> forest cover spatial coverage (3983/5808)

Comparison of RESULTS Activity Attribute and Maps

Data source: RESULTS as of Sept 22, 2008

Silviculure Activity	Activity Attribute	Activity Spatial	Activity Spatial %
Brushing (BR)	73,336	1,630	2%
Denudation (DN)	222,824	29,164	13%
Fertilization (FE)	8,822	305	3%
Juvenile Spacing (JS)	22,974	46	0%
Planting (PL)	244,373	1,087	0%
Pruning (PR)	3,077	1	0%
Site Preparation (SP)	178,061	1,396	1%
Surveys (SU)	583,921	2,193	0%
Total	1,337,388	35,822	3%

Of the total activity attribute records in RESULTS, there are only 3% of the records have activity spatial coverage.
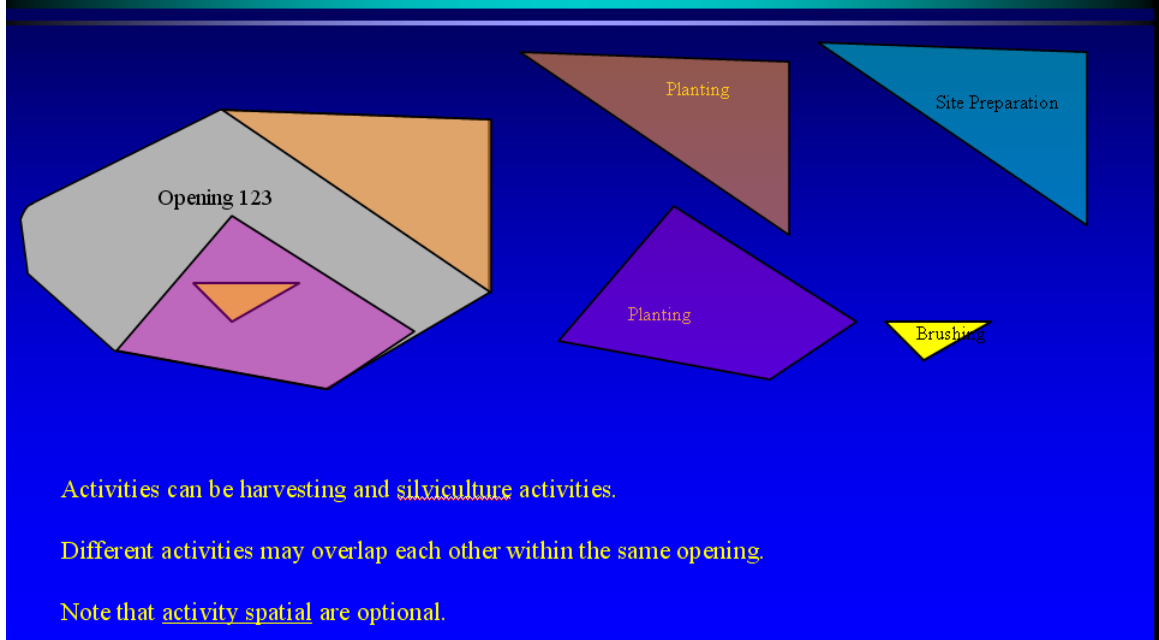
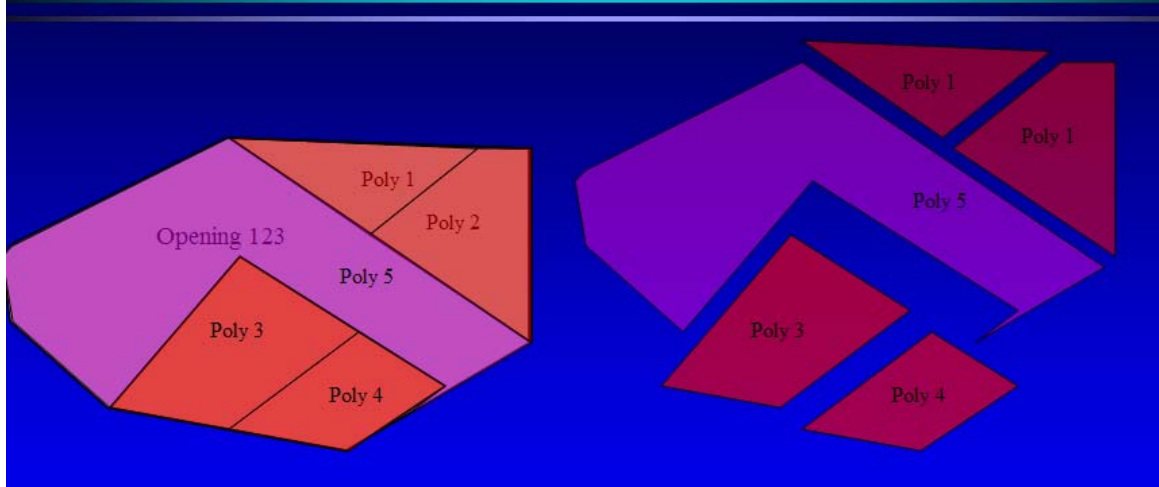## Appendix B – Spatial Relationships

Overview of Spatial Layers-Disturbance & Silv Activities

Activities can be harvesting and silviculture activities.

Different activities may overlap each other within the same opening.

Note that activity spatial are optional.

Overview of Spatial Layers-Forest Cover

Forest cover polygons cannot overlap each other within the same opening.
Complete forest cover must be submitted for entire opening.
Forest Cover polygons are separated due to differences in forest stand conditions.
Forest cover polygon cannot straddle/overlap standard unit boundaries.
More than one forest cover polygon can exist within the same standard unit boundary.
Forest cover polygon boundaries exists for openings updated after Nov 2003.