

APPENDIX IV

TIMBER SUPPLY ANALYSIS

INFORMATION PACKAGE



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IN PREPARATION OF:

MANAGEMENT PLAN No. 4

FOR TREE FARM LICENCE 43

Submission to the Timber Supply Branch,
Ministry of Forests

REVISED: APRIL, 1999



SCOTT PAPER LIMITED

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Prepared by:

Dave S. Minhas, R.P.F.
Administrative Forester
Scott Paper Limited

and

Gyula Gulyas, M. Sc. and
Randy Webb, R.P.F.
Olympic Resource Management

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1.0 INTRODUCTION

This Information Package provides a comprehensive listing of data, assumptions and modeling procedures that will be used in preparing the Timber Supply Analysis for Management Plan #4 for Tree Farm Licence (TFL) #43. The information and factors related to this Timber Supply Analysis are presented in a manner that will allow the continuation of the area-based timber supply determination. In addition, the information is being presented in a manner that will facilitate a volume-based timber supply analysis for the Fraser Block of TFL #43 as per the Chief Forester's direction.

Scott Paper Limited proposes to continue with the program that began in 1985 and will result in the net operable and available area of the TFL being converted to fast-growing poplar species (including cottonwood) for pulpwood production. The objective of the conversion program is to produce a forest with a balanced age class structure at the end of the first rotation within each block of the TFL. The Fraser Block of the TFL is fully converted to poplar species consisting of stands of natural origin, old veneer plantations and the current pulpwood production regime. The conversion of low quality mixedwood stands in Homathko and Kingcome Blocks is still in progress and completion is anticipated in another 20-30 years. Since the conversion to poplar pulpwood production is still in progress, the cut control will continue to be area-based rather than volume-based.

Due to the relatively limited local growth and yield information for fast-growing poplars, the short rotation ages and the nature of the area-based Allowable Annual Cut (AAC) calculation, a timber supply analysis to determine the sustainable cut over a 200-year planning horizon will not be conducted. Instead the area being converted annually will be based on the operable land base and the indicated rotation for poplar species. The current rotation for these species is 26 years (harvest age 25 years) in the Fraser Block and 33 years (harvest age 30 years) in the Homathko and Kingcome Blocks. Once the operable and available land base for the TFL has been fully converted to pulpwood production and more

local growth and yield information is available, then a determination can be made whether a volume-based cut control should be implemented.

A separate volume-based timber supply analysis will be prepared for the Fraser Block of TFL #43 thus providing the Chief Forester with an alternative analysis to consider in the Allowable Annual Cut determination. This alternate analysis was requested by the Chief Forester as part of the rationale and approval for Management Plan #3.

A forest estate model, COMPLAN, will be used to complete the volume-based timber supply analysis. COMPLAN is a spatial simulation model that allows the full effects of adjacency to be modeled and incorporated into the Timber Supply Analysis. It also permits the incorporation of existing Forest Development Plans (FDP) to bring greater operational relevance to the results. In addition, a Total Chance Plan, that identifies all operable areas will be completed and incorporated into the Analysis. The end result is an analysis that provides details that can be used at the operational planning level.

2.0 PROCESS

In accordance with the TFL licence agreement, Scott Paper Limited (the Licensee) must submit an information package within three months subsequent to the acceptance of the Statement of Management Objectives, Options and Procedures. This Information Package is being submitted to the Timber Supply Forester at the Ministry of Forests' Timber Supply Branch for review and comment. It includes all of the information considered relevant for the purposes of the timber supply analysis for Management Plan #4. Following acceptance, this Information Package will be included as an Appendix to the Timber Supply Analysis Report of TFL #43 Management Plan #4.

2.1 Growth and Yield

Local yield tables have not as yet been developed for the poplar stands presently being established on TFL #43 land base. The Licensee, in cooperation with the Ministry of Forests (MoF), has established a number of growth and yield plots throughout the TFL which will be used in the future to develop local yield tables and to forecast future yields.

The data collected from the 10 Permanent Sample Plots (PSPs) in the Fraser Block has been used as a basis for the managed stand yield table development for this portion of the TFL. This information and the associated yield curves are included in Appendix 4 and 5.

This Information Package has been prepared in consultation with designated MoF District and Timber Supply Branch staff to ensure that all information necessary to evaluate the timber supply of TFL #43 is available to the Chief Forester of B.C.

2.2 Missing Data

Due to the nature of the area-based timber supply analysis, some information has been left out intentionally. Effort has been made to follow the provincial guide for the submission of information packages while preparing this Timber Supply Information Package.

3.0 TIMBER SUPPLY FORECASTS / OPTIONS / SENSITIVITY ANALYSES

Table 1 lists the harvest forecasts and sensitivity analyses that will be provided in calculating the annual conversion area for all blocks as well as the volume-based analysis for the Fraser Block. A brief description of assumptions and issues related to each option is also included in Table 1.

3.1 Base Case

The base case harvest forecast will use current operational requirements on the TFL to determine the size of the annual conversion area. This approach will ensure that the operable area presently available for harvesting is fully converted by the end of the first rotation into a balanced age class distribution within each block of the TFL. A comparison will be made of the conversion area presently prescribed under Management Plan #3 (MP#3) and that proposed for Management Plan #4 by the Timber Supply Analysis using the data presented in this package. Overall, there has been a loss of 592 hectares (ha) of operable forest land available for timber production which will likely reduce the annual conversion area. The operable forest land currently available under Management Plan #3 is 3 896 hectares. The equivalent area available for Management Plan #4 will be 3 304 ha (see table 2). The reduction in area is largely attributable to the increased inoperable area (Economically Inoperable category) classification within the Homathko Block of TFL 43.

3.2 Sensitivity Analyses

Sensitivity analyses will be conducted to examine the uncertainty with regards to the current harvest ages used to determine the annual conversion area and the changes in the operable land base.

In the volume-based analysis for the Fraser Block, sensitivity analyses will be used to determine the impact of different yields (VDYP vs. 1.3*VDYP) on harvest flows and forecasts. In addition, the potential gains from using genetically superior hybrid poplar planting will be shown (see Table 1).

During preparation of the Analysis, more issues that warrant sensitivity analysis may become apparent. The Licensee will use professional judgment to decide which additional analyses are required to provide the Chief Forester with sufficient information to be able to determine a reliable AAC. These analyses will also be included in the Timber Supply Analysis Report.

3.3 Alternative Harvest Flows Over Time

The area-based conversion rate will present a single harvest flow, which can be varied through the use of cut control in the short term. Scott Paper Limited will continue to supplement any shortfalls in log supply through increased purchase on the open market and harvesting of private lands held by the company. In accordance with the timber management objective of converting all of the operable land base to high-yielding, short rotation poplar stands with a balanced age class distribution, Scott Paper will continue to harvest the full profile and utilize or sell the wood as required by the TFL document. Salvage harvesting of useable dead or damaged stands and stands at risk of erosion will take priority over other stands. Following this, the harvesting of older age classes will take preference. In addition, where feasible, harvesting of the lower-value or low grade alder and coniferous species will be targeted during periods of favorable log market conditions. The company may investigate alternative harvest flows appropriate to an area-based analysis and present them for consideration to the Chief Forester.

For the Fraser Block, a volume-based analysis will present alternative harvest flows that will allow the Chief Forester to assess the short, medium and long-term impacts of harvesting.

3.4 Other Options

A second option presented will look at the impacts on timber supply if the economically inoperable (EI) area in the Homathko Block is included within the timber harvesting land base of the TFL. The cost to access (i.e. bridge installation) this area is much higher than the current value of the timber in this portion of the Homathko Block.

TABLE 1
ANALYSIS OPTIONS

Option # Option Title	Issue to be Tested	Proposed Sensitivity Analysis	
		Title	Reason for Analysis and Range to be tested
<u>Area-based</u> #1 Base Case (Current Performance)	To determine the annual conversion area based on current management practices, performance and currently enforced guidelines which will complete conversion to high-yielding poplar spp. by the end of the first rotation while maintaining the objective of establishing a balanced age class structure on the net operable and available area of the TFL.	(1) Harvest Age	The impact on the size of the annual conversion area as a result of raising the harvest age in the Homathko and Kingcome Blocks from 30 years to 35 years will be analyzed.
#2 Addition of land base classified as currently uneconomic	To determine the annual conversion area based on current management practices, performance and currently enforced guidelines which will complete conversion to high-yielding poplar spp. by the end of the first rotation while maintaining the objective of establishing a balanced age class structure on the net operable and available area of the TFL.	(1) Operable Land Base	To determine the impact on the annual conversion area if the operable land base is increased by including the currently uneconomic operable land base.
<u>Volume-based</u> #3 Base Case (Current Performance)	Volume based analysis for the Fraser Block of TFL 43 using current management practices, performance and operational requirements. Yield adjustment of 1.3 times VDYP for pulpwood stands.	(1) Regenerated stand yields (2) Intensive Silviculture (3) Harvest Age (4) Green-up	To determine the impact on the harvest flow in the Fraser Block by increasing and decreasing stand yields by 10%. To determine the impact on the harvest flow by increasing stand yield tables by 10% due to use of genetically superior planting stock. To determine impact on the harvest forecast by reducing and increasing the harvest age by 5 years. Determine impact on harvest forecast by reducing and increasing the green-up age by 1 year.

4.0 HARVEST MODEL

No harvest model will be employed in the annual area conversion calculation portion of the Timber Supply Analysis. A 20-year plan based on the current management regime (base case) will be presented to show on a site-specific basis areas that will be harvested to fulfill the conversion requirements.

The proprietary simulation model COMPLAN will be employed in the Fraser Block to determine the AAC based on spatially explicit, volume-based cut control.

COMPLAN is a spatially explicit forest estate model that schedules harvests at the cutblock or stand level subject to adjacency (green-up) and non-timber resource constraints (cover constraints). There is a great deal of flexibility built into the model so it is possible to evaluate many different scenarios with a large degree of realism.

COMPLAN uses a hierarchical data structure that takes advantage of a Compartmental Management approach to spatial data organization. Advantages of this approach include easy integration with Geographic Information Systems (GIS), adaptation to a wide variety of tenure administration structures and integration of both strategic and operational planning.

Tests have been completed which compare results of COMPLAN with those from the B.C. Ministry of Forests' model FSSIM. These tests, done in cooperation with the MoF, showed that COMPLAN can produce results which are extremely similar to that of FSSIM. The differences are insignificant but the reasons for the differences are well understood and documented.

Key Features

COMPLAN offers a number of key features that make it ideally suited for both strategic and operational planning:

- Annual internal time increment allows accurate representation of growth, harvest, adjacency and constraint status.
- Yield table structures allow for many additional variables other than volume to be modelled.
- Initial inventory values for volume, height and other yield table columns are used and then trended with the yield tables allowing for polygon-specific values to be used.
- Constraints are localized to site-specific conditions (e.g. green-up time will be longer for cutblocks on poor sites compared with cutblocks on good sites).
- Cover constraints that address non-timber values can overlap so that it is not necessary to divide the area into management zones according to which constraint is most restrictive.
- All forested land base is retained in the simulation and contributes to cover requirements even if it is not part of the timber harvesting land base.
- Alternative silviculture systems such as selection and shelterwood may be modelled.
- Commercial thinning is supported.
- Spatially explicit nature allows harvest schedules to be easily mapped and verified.
- Flexible yield table columns and the ability to shift yield tables at different ages allow for modeling of succession as well as alternative silvicultural strategies.
- Several different prioritization algorithms are available, including minimize growth loss, oldest first, geographic priority and analysis unit priority.
- Cutblock aggregation can be used.
- Several options exist for “harvesting the profile”.

- Revenues and costs can be tracked and reported.
- Road networks can be modeled.
- There are no artificial limitations on numbers of polygons, yield tables, or other model inputs.

5.0 CURRENT FOREST COVER INVENTORY

The original forest inventory for TFL #43 was completed in the 1980s to facilitate the issuance of the TFL. Since then, it has been maintained and updated by new operational cruises and other operational assessments. The data prepared for this Analysis has been updated to September 30, 1998 and reflects the changes in the land base as well as logging and reforestation.

The current forest cover inventory meets the business needs of Scott Paper Limited and since the Licence requirement is to convert the current low quality mixedwood stands to high-yielding hybrid poplar stands, re-inventory is a low priority. As the existing stands are replaced with fast-growing hybrid poplar/cottonwood stands, the inventory information will be updated through various operational assessments. The current inventory was converted to NAD 83 base maps by using Terrain Resource Information Mapping (TRIM). The 1997 custom aerial colour photography flown at 1: 10 000 scale was used for mapping the changes in the flood plain of the large river systems in the TFL.

The forest cover inventory of the TFL has not been audited to date and preliminary discussions with the staff from the Vancouver Forest Region indicate that an inventory audit is unlikely in the near future as TFL #43 is considered a low priority.

The update process and current status of the forest cover in each block of the TFL are discussed below.

Fraser Block

Practically the entire operable land base in this block consists of cottonwood/hybrid poplar stands. Scott Paper Limited has a long history (since 1940s) of operating within this portion of TFL #43, thus the history and origin of stands is well known and documented. The inventory information for this block reflects current harvesting and the establishment of new forests. The operational assessments of survival/regeneration and free-growing have been used to update this information. In preparation for this Analysis, a number of cruise plots were established in representative stands in the Fraser Block to check volumes and update

the forest cover information if necessary. In addition, the inventory has been updated for harvesting and silvicultural activities to September 30, 1998.

Fraser Block volumes will be compiled for this Analysis using the Variable Density Yield Prediction program (VDYP) version 6.4. to close utilization standards, as required by the Ministry of Forests.

Homathko Block

The forest cover information is the original inventory that was done for the issuance of the TFL in the mid 1980s. Since then, this inventory has been updated through operational cruising and other field assessments. During each of the previous Management Plans, volumes have been compiled to close utilization standards.

In preparation for this Analysis, the forest cover polygon boundaries and labels were changed to more accurately reflect vegetation cover and characteristics, as some of the original typing was quite broad. Coloured aerial photographs flown in 1997 at a scale of 1:10 000 and operational cruises were used in this polygon refinement. All planted areas have been updated through the survival/regeneration and free-growing surveys. The inventory information is current to September 30, 1998.

The Homathko Block volumes will be compiled using VDYP to close utilization standards, as required by the Ministry of Forests.

Kingcome Block

The original Kingcome inventory was completed in 1988; it has been maintained and updated through new cruises and operational assessments. Since the last analysis, this inventory has been updated to incorporate changes resulting from logging and silvicultural activities.

The six strata defined in this Block will be grown another 5 years to determine the volumes for this Analysis. The areas and volumes harvested have been updated to September 30, 1998.

6.0 DESCRIPTION OF LAND BASE

This section describes the TFL land base and the methodology used to determine the way in which land contributes to the Analysis. Some portions of the productive land base, while not contributing to harvest, may be available to meet other resource needs.

6.1 Timber Harvesting Land Base Determination

The Timber Harvesting Land Base for TFL #43 is determined through Table 2. Note that areas are reported as net areas by Schedule "A" and Schedule "B" lands after accounting for overlaps in the reduction process. Areas and volumes have been extracted from a stand database constructed for the preparation of this Information Package. Appendix I contains the detailed area and volume summaries which were used to develop Table 2. Appendix II contains the operable land base determination for each block.

In 1989, the total reductions applied against the productive forest land base amounted to 1 350 ha; in 1993, this area increased to 1 886 ha. For 1998, the total amount of area reductions applicable has once again increased to 2 826.5 ha largely due to the refinement of environmentally sensitive areas and the addition of the economically inoperable (EI) classification. Included in this area reduction is 231.0 ha for the Lower Homathko Estuary Protected Area. The implication of this sizeable reduction is that less operable land base will be available for annual conversion during the term of Management Plan #4.

The following sections provide the total area classified in each category listed above and the subsequent area deducted from the timber harvesting land base including overlaps.

TABLE 2
TIMBER HARVESTING LAND BASE DETERMINATION

Classification	Area (ha)			Mature Vol. (m3)		
	Schedule A	Schedule B	Total	Schedule A	Schedule B	Total
Total Area	1223.8	8882.4	10106.2	111,950	1,401,339	1,513,289
Less: Protected Areas	0.0	231.0	231.0	0	79,776	79,776
Less: Non Forest	426.1	3296.5	3722.6	0	0	0
Less: Non-Productive Forest Land	0.0	0.0	0.0	0	0	0
Total Productive Forest	797.7	5354.9	6152.6	111,950	1,321,563	1,433,513
Reductions to Total Productive Forest						
Non Commercial Land (NP BR)	114.0	640.6	754.6	0	0	0
Inoperable / Inaccessible	10.6	797.3	807.9	2,231	222,917	225,148
Environmentally Sensitive Area 1 (98 %)	4.0	962.1	966.1	1,759	392,786	394,545
Environmentally Sensitive Area 2 (50 %)	0.0	52.7	52.7	0	28,147	28,147
Riparian Reserves (RIP)	9.9	14.1	24.0	3,152	3,546	6,698
Riparian Reserves (Buffer)	31.0	174.8	205.8	1,800	54,150	55,950
Grizzly Bear Habitat	0.0	0.0	0.0	0	0	0
Heritage	0.0	0.0	0.0	0	0	0
Unclassified Roads, Trails and Landings	4.2	11.1	15.3	270	3,146	3,416
Total Reductions to Productive Forest	173.8	2652.7	2826.5	9,212	704,693	713,905
Less: Volume Reductions	0.0	0.0	0.0	0	0	0
Total Reduced Land Base	623.9	2702.2	3326.1	102,738	616,870	719,608
Less: Low Site Areas	0.0	0.0	0.0	0	0	0
Less: Not Sufficiently Restocked Areas	1.0	42.7	43.7	0	0	0
Additions to Reduced Landbase						
Add: Not Sufficiently Restocked Areas	1.0	42.7	43.7	0	0	0
Timber Harvesting Land Base	623.9	2702.2	3326.1	102,738	616,870	719,608
Less: Future Roads (1%)	0.0	21.7	21.7	0	5,299	5,299
Less: Future Site Degradation	0.0	0.0	0.0	0	0	0
Total Long-term Land Base	623.9	2680.4	3304.4			
Total Long-term Volume				102,738	611,571	714,309

6.2 Total Area

The total area of the TFL is 10 106.2 ha as shown in Table 2. The net change in total area when compared to the 1993 total area (approximately 23 ha) is largely attributable to improved map bases resulting from 1: 10 000 aerial photography providing a more accurate measure of the TFL boundary. A minor area (less than 10 ha) can be attributed to the process of erosion along the main channel of large rivers.

6.3 Non-forest

The non-forest portion includes the following land cover components: lakes, rivers, swamps, mud, gravel bars, sandbars, etc. Table 3 summarizes the total non-forest area within TFL #43 by block. Classified roads are included within this category and have been defined as discrete polygons. The total non-forest area deducted from the timber harvesting land base is 3722.6 ha.

TABLE 3
TOTAL AREA OF NON-FOREST WITHIN TFL 43

TYPE	NON-FOREST AREA (ha)			Total Area Reductions to Productive Forest (ha)
	ERASER	HOMATHKO	KINGCOME	
Gravel Bar	0.0	4.6	0.0	4.6
Lake	0.0	37.9	0.0	37.9
Classified Roads	3.1	86.0	21.1	110.2
Mud / Slough	54.1	20.4	3.7	78.3
Rock / Slide	0.0	15.2	1.6	16.8
River / Creek / Stream / Side Channel	1073.2	507.3	62.3	1642.7
Sandbar	671.6	418.4	56.7	1146.7
Swamp / Treed Swamp	2.5	630.2	49.8	682.4
Other (Kilby nursery)	3.1			3.1
TOTAL	1807.6	1719.9	195.1	3722.6

6.4 Non-productive Forest

There are no non-productive forest lands classified within the TFL inventory. All productive areas harvested will be converted to high-yielding poplar plantations. Stands consisting of brush and scrub timber types are included in the non-commercial land category described below.

6.5 Inoperable/Inaccessible

Table 4 provides information on the area in the TFL which is classified as inoperable. The majority of this area is in the Homathko Block of TFL #43.

There are two categories of inoperable areas defined within the forest inventory. The first category strictly relates to the area being physically inaccessible and thus not available for timber harvesting. The second category uses an economic criterion to determine operability. In the latter case, timber harvesting is not justifiable given the costs of harvesting and the expected value of the timber.

A large portion of the area between the Jewakwa River and Heakamie River drainages has been classified as Economically Inoperable (EI). The rationale for classifying this area as EI during this MP is the high costs associated with bridge crossings to access this relatively low value and low quality timber. If a suitable cost-sharing arrangement is negotiated with other licensees in the area, the economic viability of harvesting would be greatly enhanced. However, at this time, Scott Paper Limited considers it appropriate to remove this from the timber harvesting land base. In the event that significant improvements are realized in the market value of this timber, a bridge crossing would become a more economically viable option. Scott Paper Limited will continue to pursue solutions and options that will result in the inclusion of this area within the operable land base of the TFL. A total of 545.6 ha are currently classified as Economically Inoperable. The total area classified as inoperable and therefore deducted from the Timber Harvesting Land Base (THLB) is 807.9 ha.

TABLE 4
AREA CLASSIFIED AS INOPERABLE

Criteria	FRASER Area (ha)	HOMATHKO Area (ha)	KINGCOME Area (ha)	Total Reductions to Productive Forest Area (ha)
I - Physically Inoperable	53.9	141.9	66.4	262.2
EI - Economically Inoperable *		545.6		545.6
Total	53.9	687.6	66.4	807.9

Based on economic criteria. Timber values associated with these areas do not justify bridge crossings necessary to establish access into the area. If economic conditions change and/or a suitable cost-sharing agreement can be reached with other licensees, area will be reclassified.

6.6 Non-commercial Cover

Approximately 755 hectares (Table 5) have been identified as non-productive brush (NP BR) within the forest cover inventory of the TFL and, as such, has been removed from the THLB. These areas are occupied by brush species and/or minor amounts of merchantable cottonwood. Since most of these areas are isolated small patches (islands) and/or newly accreted areas within the flood plain, they are not considered part of the operable land base. However, if a given area remains stable over time and contains sufficient merchantable timber along with being in the vicinity of the operable land base, it may be included in the long term timber harvesting land base. See species conversion Section 8.8.5 for further documentation.

TABLE 5
AREA CLASSIFIED AS NON-COMMERCIAL

Non-Commercial Cover	Block			Total Reduction to Productive Forest (ha)
	FRASER	HOMATHKO	KINGCOME	
NP BR	438.8	288.5	27.3	754.6

6.7 Low Site

No low site cutoff has been used or applied. Although site indices as low as 13 (at breast height age 50) do occur on this TFL, this is not considered low enough to warrant removal from the productive forest land. It is anticipated that much of this area will have higher productivity once fast-growing managed poplar stands have replaced the existing stock.

6.8 Environmentally Sensitive Areas (ESAs)

Table 6 provides a breakdown of the Environmentally Sensitive Areas (ESAs) in the TFL. A total of 1018.9 hectares have been identified as sensitive (ESA1 and ESA2) and approximately 82% of this area is found in the Homathko Block of TFL #43. The ESA mapping approved for MP #3 has been updated for MP #4 by incorporating agreements made during Forest Development Plan review. Only wildlife and fisheries sensitive areas have been identified within the TFL. Although a very small amount of recreationally sensitive area is shown, its occurrence is linked to fisheries and wildlife values. The wildlife sensitive areas are associated with grizzly bears in the Homathko and Kingcome portions of the TFL. In the Fraser Block, the bald eagle (nesting and roosting sites) is the principal wildlife species of concern. The implication of this mapping is that special management requirements must be followed in all ESAs. Generally, ESA1 areas have more demanding (constraints on harvest) requirements than that of ESA2 areas.

In the context of timber supply analysis, reducing the amount of area available for harvesting in ESAs satisfies the management requirements. To account for the ESAs within the Timber Supply Analysis, a netdown factor of 98% and 50% will be used for ESA1 and ESA2 categories respectively. At an operational level, specific, highly valuable ESA1 areas will be netted down by 100% while others not as critical will be netted down by 90%. This approach is endorsed by Ministry of Environment, Lands and Parks and provides adequate flexibility to carry out minor polygon refinements at the field level if warranted. After

subtracting all overlap areas, the result is 966.1 ha of ESA1 land being removed from the productive forest and 19.7 ha ($985.8 - 966.1$) remaining within the Timber Harvesting Land Base (THLB). After applying a similar technique to ESA2 areas and using a 50% reduction, 52.7 ha remain within the THLB. Considering that 147.3 ha of ESA2 areas are inoperable land, (therefore 100% removed) the total ESA 2 reduction from the THLB is actually 200.1 ha.

In the Homathko Block, a large proportion of the fisheries and wildlife sensitive area has been incorporated in the forest ecosystem network (FEN) established for MP #3. This FEN has been further enhanced by the declaration of the Lower Homathko Estuary Protected Area (PA) and additions to the ESAs for MP #4.

Although extensive areas of moderately sensitive recreation areas have been identified by the recreation inventory due to fisheries and wildlife related activities, only a small portion has been given an ESA designation. This is due to the fact that recreational use in the Fraser Block is dispersed and is generally confined to non-forested areas (sand and gravel bars within the floodplain). A vast majority of this area is included in sensitive fisheries (riparian) and wildlife areas which have already been removed from the productive forest land base. Furthermore, much of the recreationally valuable area in the Kingcome and Homathko Blocks is remote and largely inaccessible therefore no recreation ESA designations have been applied.

TABLE 6
ENVIRONMENTALLY SENSITIVE AREAS

ESA Category	ESA Description	Fraser Area (ha)	Hornetkoi Area (ha)	Kingcome Area (ha)	Combined Area (ha)	% Reduction	Total Reductions to Productive Forest (ha)
Ef ₁	Fisheries Sensitive Zone (high)	0.0	291.7	85.4	377.1	98.0	369.6
Ew ₁	Wildlife Sensitive Zone (high)	3.4	313.2	10.2	326.8	98.0	320.2
Ef ₁ w ₂	Fisheries Sensitive Zone (high) Wildlife Sensitive Zone (moderate)	0.0	32.0	0.0	32.0	98.0	31.4
Ew ₁ r ₂	Wildlife Sensitive Zone (high) Recreation (moderate)	6.5	0.0	0.0	6.5	98.0	6.4
Ef ₁ w ₁	Fisheries Sensitive Zone (high) Wildlife Sensitive Zone (high)	0.0	210.9	32.6	243.5	98.0	238.6
Subtotal	All ESA1 Designated Areas	9.9	847.7	128.2	985.8		966.1
Ew ₂	Wildlife Sensitive Zone (moderate)	0.0	79.9	0.0	79.9	50.0	39.9
Ef ₂	Fisheries Sensitive Zone (moderate)	0.0	25.6	0.0	25.6	50.0	12.8
Subtotal	All ESA2 Designated Areas	0.0	105.5	0.0	105.5		52.7
Total		9.9	953.2	128.2	1091.3		1018.9

*Note: Inoperable, Non-forest, Non-commercial and Protected areas have been reduced by 100%

6.9 Riparian Reserves and Management Zones - Streams

The riparian reserve requirements are satisfied by classifying areas as ESAs (fisheries sensitive zones, Table 2) and/or applying a specific width linear reduction (Table 7) adjacent to the stream channel. TFL #43 is located in the active flood plain of major rivers and the major applicable stream classification is S1-Large River. The Riparian Management Area Guidebook specifies a 100 m management zone adjacent to this riparian class. Although a reserve zone is not required, the best management practices require maintenance of old hardwood trees along the river channels and in other key habitats. The Guidebook suggests the following operational practices to ensure the maintenance of older hardwoods within the flood plain:

- Retain a minimum of 50% of the trees on the first harvest within 20 m of the outer perimeter of the islands and along back channels, side channels and sloughs. During the next harvest, retain a minimum of 10% of these larger trees replacing them with (to achieve 50% retention target) the largest trees planted at the previous harvest.

Scott Paper Limited, with input from Department of Fisheries and Oceans and Ministry of Environment, Lands and Parks, have refined these practices for each block of the TFL. In preparation for the Timber Supply Analysis, the following procedure was used to account for the riparian reserves (buffer) areas within each block:

- In the Fraser Block a 10 m riparian reserve (50% retention of the 20 m adjacent to stream channels) is retained adjacent to islands, back channels, side channels and sloughs. In instances where reserves have been retained after harvesting, the actual area (riparian reserves (RIP) in Table 2) is deducted from the timber harvesting land base.
- For the Homathko and Kingcome Blocks a 20 m riparian reserve is maintained adjacent to island, back channels, side channels and sloughs.

The remaining portion of the management zone in each block is clearcut as this is the most suitable regeneration method for shade intolerant cottonwood/hybrid poplars.

It is understood that at the operational level site specific conditions may require a variation from the methodology used above to account for riparian provisions.

The total area classified as riparian reserve is presented in Table 7. A large portion of this area in Homathko and Kingcome Blocks is already classified as environmentally sensitive and previously deducted from the THLB in the ESA section. Table 7 also provides the net area reduction that is applied to the timber harvesting land base. These riparian areas have been netted out of the timber harvesting land base at 100%.

TABLE 7
RIPARIAN RESERVE AND MANAGEMENT ZONES - STREAMS

Location (i.e. Block)	Riparian Class	Reserve Width (ha)	Reserve Area (ha)	Management Zone Width (m)	Area Reduction applied to Productive Forest (ha)
Fraser	S1-Large River	10	119.9	100	56.4
Homathko	S1-Large River	20	266.9	100	80.6
Homathko	S1	50	51.3	20	8.8
Kingcome	S1-Large River	20	60.5	100	46.7
Kingcome	S1	50	24.5	20	4.3
Hoodas Creek (Kingcome)	S2/S3	20	5.1	20	9.0
TOTAL					205.8

6.10 Riparian Reserve Zones - Wetlands and Lakes

Cumsack Slough (W1) is the major wetland within the Homathko Block of TFL 43. The riparian reserve width requirement is 10 m but due to the importance of this area for wildlife purposes a much larger reserve has been retained through the ESA designation. Since this area has been removed previously from the productive land base, no separate reduction is required.

There are no lakes identified within the TFL that require riparian reserves.

6.11 Wildlife Habitat Deductions

No separate deductions are made for wildlife habitat purposes. Significant reductions have been made to the productive forest land base to account for wildlife habitat requirements through the ESAs. In the Homathko and Kingcome Blocks, approximately 700 ha (approximately 350 ha net of overlap) have been classified as Ew to provide habitat requirements for grizzly bears (see table 6). In the Fraser Block approximately 10 ha have been set aside to meet bald eagle nesting and roosting site requirements. Furthermore, the riparian and Ef areas deducted from the productive forest land base provide additional areas for wildlife habitat purposes.

6.12 Cultural Heritage Resource Reductions

No reductions have been made to the THLB for cultural heritage resources in the TFL. The archaeological impact assessments conducted to date on several cutblocks within the Fraser Block have not discovered cultural heritage values. The dynamic nature of the flood plains along with extensive history of managing some of these areas has guided the decision not to make specific reductions for cultural heritage resources. However, if values are found, Scott Paper Limited will be directed by the recommendations of the Archaeology Branch.

6.13 Other Sensitive Site Reductions

No specific reductions have made to the productive forest to accommodate landscape unit/biodiversity requirements. It is expected that, to a large extent, the areas currently reserved from harvesting will be sufficient to fulfill these requirements on this relatively small and intensively managed TFL. Section 10.3.1.6 presents a further discussion and rationale on this issue.

The erosion/accretion comparison of the timber harvesting land base revealed a minor amount of erosion and this has been accounted for in the TFL total land base calculation.

The process followed to account for and track land erosion/accretion is as follows:

- a) Every five years new aerial photography is flown by the company to update all land and forest cover changes due to river erosion/accretion.
- b) Eroded areas are automatically withdrawn from the timber harvesting land base through the updated base mapping.
- c) Newly accreted areas are not included into the available timber supply land base until the forest cover has reached three meters in height and has 50% or greater crown closure, and are determined to be environmentally and economically operable.

The overall reduction applied to the operable forest land base as a result of erosion/accretion is 8.9 ha and this is accounted for in the total area (sect. 6.4) of the TFL (eroded area is classified as non-forest).

6.14 Problem Forest Types (Deciduous Stands)

Table 11 (Area by Analysis Unit and Leading Species Group) provides a comprehensive breakdown of the area occupied by deciduous-leading stands. Since the company's primary objective is to convert existing available operable stands to high-yielding poplar pulpwood

plantations, no reductions are necessary to account for problem forest types (deciduous stands) except for those previously made under non-commercial types.

6.15 Roads, Trails and Landings

6.15.1 Classified Roads, Trails and Landings

Classified roads, trails and landings are those that are mapped as polygons distinctly separate from adjacent polygons. Only the mainline roads have been identified as separate polygons as type "U" on the forest cover maps. These roads have been classified as non-forest and removed from the productive land base (see Table 3). Table 8 summarizes the areas of classified roads for each block of the TFL and the subsequent reductions applied to the total area.

TABLE 8
CLASSIFIED ROADS, TRAILS AND LANDINGS

TFL Block	Road Name	Area (ha)		
		Roads	Trails & Landings	Total Reductions to Total Area
Fraser	Carey Road	3.1	0.0	3.1
Homathko	Homathko West Mainline	60.2	0.0	60.2
	Homathko East Mainline	25.8	0.0	25.8
Kingcome	Hoodas Mainline	13.7	0.0	13.7
	Kingcome East Mainline	5.9	0.0	5.9
	Atlatzi Mainline	1.5	0.0	1.5
Total		110.2	0.0	110.2

6.15.2 Unclassified Roads

Unclassified roads on the TFL have been mapped as lineal features. For the purposes of determining the total area of unclassified roads, all are assumed to occupy a 10 meter wide right-of-way. All roads in the Fraser Block are confined to Schedule "A" lands; roads in the Homathko and Kingcome Blocks are on Schedule "B" lands. All trails and landings are rehabilitated and restocked immediately following logging and consequently there are no area reductions associated with these features. Table 9 indicates the area of unclassified roads in the TFL.

TABLE 9
UNCLASSIFIED ROADS

Location	Area (ha)			
	Roads	Landings	Trails	Total Reductions to Productive Forest
Fraser	4.2	0.0	0.0	4.2
Homathko	9.1	0.0	0.0	9.1
Kingcome	2.0	0.0	0.0	2.0
Total	15.3	0.0	0.0	15.3

6.15.3 Future Roads, Trails and Landings

The Fraser Block is considered to be completely roaded thus no further netdown for future roads is necessary. For the Homathko and Kingcome Blocks, future roads have been subtracted as 1% of the THLB as small areas within these blocks will require access.

6.16 Exclusion of Specific, Geographically Defined Areas - Lower Homathko PA

The Lower Homathko Estuary Protected Area contains approximately 231 ha of land within TFL #43. This area has been excluded from the Homathko Block of the TFL as shown in Table 2. A formal instrument for removing this area from the TFL has not been issued. The

net loss to the timber harvesting land base as a result of removing this area is nil as Scott Paper Limited had classified any remaining operable area as environmentally sensitive once it was declared as a study area. Table 10 summarizes the area removed from the TFL.

TABLE 10
LOWER HOMATHKO ESTUARY PROTECTED AREA CLASSIFICATION

Classification	Total Area Reductions
Non-forest Area	13.1
Non-commercial Cover	72.7
Environmentally Sensitive Area	145.2
Total Area	231.0

Information Source: Order-in-Council establishing the Protected Area

Method used to estimate area reduction: The legal description of the Order-in-Council was plotted on the forest cover maps of TFL #43 Homathko Block and the portion of the protected area occupying land within the TFL was calculated.

6.17 Any Other Land Base Exclusions

There are no other land base exclusions to be accounted for at this time.

6.18 Area Additions

There are no additions to the operable land base at this time except for those listed under species conversion.

7.0 INVENTORY AGGREGATION

In keeping with the approach used in Management Plan #3, the current inventory updated to September 30, 1998 has been aggregated on the basis of leading species, site index and 5-year age class. Of principal interest are the cottonwood and alder-leading stands. These stands are the only ones which have been aggregated into species-specific groups; the remainder of the stock is aggregated either as "other deciduous" or "conifer leading." Site index at breast-height age 50 is used as the indicator of site quality. The site index for converted stands is described below in the site index assignment section.

7.1 Management Zones

For the purposes of this Timber Supply Analysis, the entire area of the net operable and available land base is considered to belong to the Normal Management Zone (where timber production is largely unconstrained). Based on the current management practices in the TFL, the Normal Management Zone (NMZ) is in full compliance with FPC requirements. The rationale and criteria used in defining NMZs are provided in Table 11.

TABLE 11
MANAGEMENT ZONE - STATUS QUO OPTION

Management Zone	Net Area (Gross Area) ha	Criteria Used to Delineate Zones	Rationale/ Comment
Normal Management Zone (area-based analysis)	3 304 (6 152)	This zone is that operable forest land available for timber production which is net of inoperable areas, environmentally sensitive areas, riparian reserve zones and road area.	Timber harvesting in this zone is considered to be unconstrained as explained in the accompanying text. The regulatory FPC requirements must be followed.
Normal Management Zone - Fraser Block only (volume-based analysis)	1 152 (1 739)	This zone is that operable forest land available for timber production which is net of inoperable areas, environmentally sensitive areas, riparian reserve zones, bald eagle habitat and road area.	Timber harvesting in this zone is considered to be unconstrained except for the PR VQO polygons that have a maximum alteration limit of 15% as explained in the accompanying text.

The proportion of the areas designated as visually sensitive within this zone will be subject to a planimetric percent denudation limit. A significant proportion of the total area in the Fraser Block, 1 402.3 ha (see Table 24) has been designated as a Maximum Modification Visual Quality Objective area (VQO) where a maximum of 40% of the green area may be disturbed at any time. This level of percentage alteration is considered non-constraining to the timber supply and therefore will not be modeled as cutblock size, adjacency and green-up requirements will adequately address the objectives for this VQO.

A smaller area of 91.3 ha (see Table 24) has been designated as a Partial Retention (PR) VQO area where, under the current guidelines, a range of 5.1-15% disturbance is allowed. The level of percent alteration is determined by the Visual Absorption Capability of the area. In this instance 15% alteration will apply as the VAC is characterized as high due to a

highly modified landscape consisting of sand and gravel bars, farmland, residential areas, and utility corridors. In a number of instances the PR VQO has been assigned to small islands (less than 25 ha). In such cases, the percent denudation limit will be applied to these areas within the Normal Management Zone in the volume-based harvest forecasts. This process varies significantly from operational practice where it is not possible to break up the harvest of an individual island due to logistics of equipment mobilization and efficiency of operations. The assumption is that riparian reserves, modified surrounding landscape consisting of farm fields and residential areas, sand and gravel bars along with rapid regeneration will preserve the VQO objectives. The Timber Supply Analysis Report will include a disturbance area breakdown and a sensitivity analysis showing the harvest forecast with the percent denudation limit set at 10 and 15% as well as a forced scenario of harvesting the whole island.

The visually effective green-up (VEG) height of 3 m used in the Timber Supply Analysis was chosen due to the flat terrain in the Fraser Block. On average, the slopes of the visually sensitive areas within the flood plain is less than 10%. In addition, the viewing angles are generally flat with the one exception being the Mount Woodside Rest Area. Because yield tables are unreliable in projecting height growth at young ages, the timber supply model assumes that the VEG height requirement has been met 3 years after harvesting. The company's field observations have indicated that the height attained by poplar after 3 growing seasons ranges from 3 to 7 meters depending upon site factors and stand tending treatments. In Management Plan #3 a 1 year visually effective green-up age was used.

7.2 Analysis Units

Aggregation of species groups is necessary to facilitate forest level modeling. Species of similar biological, management and silvicultural attributes are grouped to reduce complexity. This must be balanced with creating groups small enough to allow accurate modeling of stand yields.

Table 12 provides a breakdown of the species groupings defined for the operable land base. The operable area has been aggregated into 23 analysis units, as cottonwood/alder leading, other deciduous leading and conifer leading units with some aggregation of the conifer leading stands being done on the basis of site index range.

TABLE 12
AREA BY ANALYSIS UNIT AND LEADING SPECIES GROUP

Analysis Unit	Leading Species and Site Index	FRASER (ha)	HOMATHKO (ha)	KINGCOME (ha)	Total Area (ha)	% of Operable Land Base
1	Ac SI 32		106.2		106.2	3.19
2	Ac SI 34		5.7		5.7	0.17
3	Ac SI 35	93.7			93.7	2.82
4	Ac SI 36			19.9	19.9	0.60
5	Ac SI 37		1066.0		1066.0	32.05
6	Ac SI 40		29.8	244.1	273.9	8.24
7	Ac SI 45	361.5		19.0	380.5	11.44
8	Ac SI 49	672.3			672.3	20.21
9	Dr SI 16		33.9		33.9	1.02
10	Dr SI 25		170.5	38.4	208.9	6.28
11	Dr SI 32				0.0	0.00
12	Dr SI 34		91.5	29.6	121.2	3.64
13	Dr SI 37		77.2		77.2	2.32
14	Dr SI 45			13.3	13.3	0.40
15	Other Deciduous SI 13		0.1		0.1	0.00
16	Other Deciduous SI 22		0.4		0.4	0.01
17	Other Deciduous SI 28		2.9		2.9	0.09
18	Other Deciduous SI 36		4.3		4.3	0.13
19	Other Deciduous SI 37		16.4		16.4	0.49
20	Conifer SI 15-20		11.7		11.7	0.35
21	Conifer SI 21-25		41.8	9.7	51.4	1.55
22	Conifer SI 26-30	6.4	51.4	55.5	113.3	3.41
23	Conifer SI 31-35		9.8	3.9	13.7	0.41
	NSR	18.0	4.6	16.7	39.3	1.18
Total		1151.9	1724.1	450.1	3326.1	100.00

* Note: Operable areas not associated with polygons (e.g. Riparian reserve (buffers), unclassified roads, etc.) were reduced as a % of productive area.

Table 13 offers an alternative volume-based stratification for the Fraser Block to allow comparison between short, medium and long-term harvest flows. In this case, seven

analysis units are stratified into four strata: natural cottonwood, old veneer plantations, hybrid poplar and coniferous.

TABLE 13
FRASER BLOCK VOLUME-BASED ANALYSIS UNITS

Analysis Unit	Stratum Name	Site Index	Total Area (ha)	% of Fraser Operable Land Base
1	Natural Cottonwood (Ac)	35	93.7	8.1%
2		45	308.7	26.8%
3		49	117.2	10.2%
4	Veneer Plantations	49	139.9	12.1%
5	SRIC Hybrid Poplar (Ax)*	45	70.9	6.2%
6		49	415.0	36.0%
7	Conifer	29	6.4	0.6%
Total			1151.9	100.0%

*Short Rotation Intensive Culture (SRIC)

8.0 GROWTH AND YIELD

Yield curves for stands of natural origin have been prepared using the MoF Variable Density Yield Prediction (VDYP) program, version 6.4. These are referred to as natural stand yield tables.

Managed hybrid poplar stand yields have been prepared for stands regenerated and conforming to minimum stocking standards. Field observations and preliminary permanent sample plot data indicate that the VDYP yields are significantly lower than productivity on the newly established - intensively managed plantations - found on TFL #43. After consultation with the Ministry of Forests' Research Branch and using the permanent sample plot data, it was decided to increase the VDYP generated natural cottonwood yields by 30% in order to represent the managed stand yields in the Fraser Block. Appendix V contains the permanent sample plot data used to support this increase in yield. For the Kingcome and Homathko Blocks, a 10 percent increase has been projected for pulpwood-producing hybrid poplar plantations based on preliminary field observations. Once permanent sample plot data is gathered and analyzed, more definitive managed stand yields will be available. Further details on managed stand yield tables and the use of permanent sample plot data is given in Section 8.8.

8.1 Site Index Assignments

Site indices were assigned to each stand using a combination of field reconnaissance data, permanent sample plot data and field observations. These values were then used to compute stand volumes using VDYP version 6.4; the volumes obtained were evaluated and adjusted by revising the site index assignments where necessary. The site index values applied are indicated in Table 14.

TABLE 14
SITE INDEX VALUES USED TO COMPUTE CURRENT INVENTORY

Site	Cottonwood Leading - BHA Site Index			Other Leading Species - BHA 50 Site Index								
Class	Fraser	Homathko	Kingcome	Cw	Dr	Ep	Fd	Hw	Mb	Pl	Ss	Ba
G	Planted - 49	G - 37	All Sites - 40	29	34	28	35	28	36	27	34	25
M	Natural - 45	M - 32		23	25	22	28	23	26	17	26	
P	Natural - 35	P - 27		15	16	13	18	15	17	13	17	

Site index values for cottonwood-leading stands in the Fraser Block were derived from permanent sample plots established in naturally regenerated and planted stands. Site index values for similar stands in the other two blocks were derived from sample tree heights taken during the 1988 inventory of the Kingcome Block and top height sampling in 1994 in the Homathko Block. To determine stand heights for the purpose of computing volumes, extensive use was made of the MoF site index program, SiteTools, which used the 1992 Thrower Curves for black cottonwood.

Site indices at breast height age 50 (BHA 50) for the leading species in the remaining stands were interpolated from the 1979 curves using the mid-range values of BHA 100 site index for good, medium and poor sites. This approach has been used due to the lack of availability of height data in the forest cover attribute file for the TFL. The importance of this information is diminished to a large extent in an area-based AAC calculation.

Analysis unit site index is derived as the area-weighted average of the polygon site indices in the analysis unit (pooled species group and site index range). A breakdown of operable area by analysis unit (species group and site index) is provided in Table 12 (Area by Analysis Unit and Leading Species Group).

8.2 Utilization Levels

Table 15 summarizes the utilization levels currently in effect for existing stands and proposed for utilization of future stands.

TABLE 15
UTILIZATION LEVELS

Species Group	Utilization			Firmwood Standard (%)
	Minimum DBH (cm)	Stump Height (cm)	Top DIB (cm)	
Mature Conifer	17.5	30.0	15.0	50
Immature Conifers	12.0	30.0	10.0	50
Older Mature Deciduous > 40 years old	17.5	30.0	15.0	50
Younger Mature Deciduous > 24 years old but < 41 years old	12.0	30.0	10.0	50

8.3 Decay, Waste and Breakage

VDYP version 6.4 was used in batch mode to compute volume by species for each stand in the Fraser and Homathko Blocks. The Growth and Yield Section of the Forest Inventory Branch instructed the Licensee not to use the Waste 2 and Breakage Factors in computing net volumes for cottonwood as they are not representative of actual losses on this TFL. The stands on the TFL are younger in age and better utilization is practiced.

For the Kingcome Block, VDYP was used in the interactive mode to generate mixed species yield tables to derive a percentage increase in volume per hectare over ten years for the 6 strata compiled in 1988. This increase is based on volumes less Decay, Waste 2 and Breakage for all species including cottonwood. Although this is not consistent with the procedure indicated above, cottonwood volumes in each stratum had been reduced by 10% for decay and 5% for breakage in the 1988 compilation. VDYP was used in batch mode to compute volumes for stands in the Kingcome Block which did not belong to the 6 strata. Volumes for cottonwood in these stands are net decay only.

The Decay, Waste and Breakage Factors used to compute net volumes for each species were, in all applicable cases, the default loss factors used in VDYP version 6.4.

8.4 Operational Adjustment Factors

Operational adjustment factors were not applied in the construction of VDYP yield tables used to update unmanaged stand volumes in the 1988 inventory of the Kingcome Block or used in generating unmanaged stand volumes for the Fraser and Homathko Blocks.

Hybrid poplar pulpwood (Short Rotation Intensive Cultural regime - SRIC) plantation yields were derived by increasing the VDYP natural cottonwood yields by 30 % in the Fraser Block and by 10% in the Homathko and Kingcome Blocks. The increase is to account for:

- 1) Growth trends observed in PSPs in intensively managed pulpwood plantations (Appendix V);
- 2) The 45 m site index limitation in VDYP for cottonwood stands.

8.5 Volume Deductions

There are no volume reductions required to account for excessively decadent stands or non-commercial species in existing stands. All usable wood is extracted as existing stands are converted to high-yielding poplar plantations.

8.6 Yield Table Development

The long-term timber management objective of this TFL is to convert all of the operable area to high-yielding poplar stands with a balanced age class distribution. Consistent with this objective, the cut on TFL #43 since commencement of Management and Working Plan #1 in 1985 has been area-based rather than volume-based. The variability and difficulty associated with estimating growth and yield of current and future stands has been a particularly important factor in regulating the cut on an area basis. Approval to continue with this method of cut control during the term of Management Plan #4 beginning in 1999 has already been obtained with the approval of the Statement of Management Objectives,

Options and Procedures submitted July 9, 1998. Since the stage has been set to continue with the area-based cut control until the end of the conversion period and sufficient information is not yet available to develop localized yield curves for the intensively managed stands, the yield tables used for MP #4 will be based on VDYP and/or modified using permanent sample plot data to reflect the growth on lands within TFL #43. Since a volume-based timber supply analysis will not be prepared for the Kingcome and Homathko Blocks, the development of local yield table is not as crucial at this time.

In conjunction with the British Columbia Coastal Forest Productivity Council, Scott Paper has installed 14 permanent sample plots in immature poplar stands throughout the TFL. These plots, which are being remeasured at 5-year intervals, will be used to develop preliminary localized yield curves for modeling growth and yield in the Fraser Block only. The 10 plots in the Fraser Block have been stratified in accordance with the analysis units listed in Table 13. The information collected from these 10 plots will be used to adjust VDYP yields for intensively managed poplar plantations. As additional information is collected, these preliminary yield curves (based on VDYP) will be adjusted to reflect the growth and yield over the whole TFL.

8.6.1 Base Yield Tables

Volumes reported in this Information Package are based on individual polygon estimates developed with VDYP. Pulpwood hybrid poplar plantation yields were derived by increasing the VDYP natural cottonwood yields by 30 percent in the Fraser Block and by 10 % in the Homathko and Kingcome Blocks. Veneer plantations in the Fraser Block were assigned with 390 m³/ha average volume based on operational cruise data.

8.6.2 Aggregated Yield Tables

For forest estate modeling, VDYP will be used for predicting existing stand yields at the analysis unit level. Species group and site index range have been used to define analysis units in the Fraser Block for the volume-based analysis.

The methods used to generate aggregated yield tables in Appendix IV are:

- Each polygon in the net land base has been assigned to an analysis unit on the basis of species group and site index, as well as factors discussed in Section 7.2.
- Area-weighted average site index and species composition attributes have been extracted for each analysis unit.
- These attributes, in addition to Decay, Waste and Breakage Factors associated with forest inventory zone and special cruise data are used to drive VDYP.
- Yields are compiled to 17.5 cm dbh, 10.0 cm top and 30.0 cm stump height.

8.7 Yield Tables for Unmanaged Stands

8.7.1 Existing Mature Timber Volumes

The existing mature timber volumes were derived similarly to the method used in MP #3 with the incorporation of the aggregation rules as shown in Table 12 (Area by Analysis Unit and Leading Species Group).

The existing mature timber volumes for stands of the TFL are derived in two ways. The first used VDYP version 6.4 to determine the relative increase in volume over a ten-year period for 6 strata sampled in the 1988 inventory of the Kingcome Block. The second method used VDYP to compute volumes by species for the remaining stands in the Kingcome Block and for each stand in the Fraser and Homathko Blocks based on species composition, TSA average crown closure and the age and top height of the leading species.

To derive volumes for each stand, attribute files were converted to ASCII files and run through VDYP version 6.4 in batch mode. Volumes were generated from each ASCII file to obtain gross volumes less decay only for cottonwood and gross volumes less Decay, Waste 2 and Breakage for all other species by specifying the appropriate FIZ and PSYU/block codes. In a letter dated November 8, 1993, the MoF Inventory Branch recommended against the application of Waste and Breakage Factors for cottonwood as they are inappropriate for the geographic region in which this TFL lies and insignificant waste and breakage has been

experienced to date. The volumes generated by VDYP were brought together in the stand database developed for this Information Package.

Volumes generated by VDYP for the 6 strata in the Kingcome Block were not used and instead the average volumes compiled for each stratum in 1988 were raised by an appropriate percentage as derived from mixed species VDYP tables developed for each stratum. These tables are included in Appendix III. The percentage increase applied to each stratum is indicated in Table 16.

TABLE 16
PERCENTAGE VOLUME INCREASES FOR 6 STRATA IN THE
KINGCOME BLOCK

Stratum Number	Species Composition	Average Age (yrs)	BHA 50 Site Index	1988 Volume (m ³ /ha)	5 yr % Increase derived from VDYP	1993 Volume (m ³ /ha)	10 yr % Increase derived from VDYP	1998 Volume (m ³ /ha)
1	Ac48 Dr21 Ss19 Hw5 Cw5 Ba2	72	40	514	3	529.4	5.8	543.8
2	Ac58 Dr17 Ss14 Hw10 Cw1	65	40	486	5	510.3	7.0	520.0
3	Ac77 Dr22 Cw1	44	40	288	11	319.7	21.6	350.2
4	Dr73 Ac15 Ss8 Hw3 Cw1	67	34	495	2	504.9	3.3	511.3
5	Dr70 Ss14 Hw13 Ac3	58	25	329	8	355.6	17.8	387.6
6	Hw38 Ac24 Ss17 Dr9 Cw9 Ba3	98	28	765	3	788.0	6.3	813.2

Table 17 provides a breakdown of the operable land base by age class, site index range and species group.

All deciduous stands, including high-yielding poplar and cottonwood stands, are considered mature at age 25 in the Fraser Block and at age 30 in the Homathko and Kingcome Blocks. All conifer species in this TFL are considered mature at age 121.

TABLE 17
OPERABLE LAND BASE BY AGE CLASS AND MATURE VOLUME

	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	360	365	370	375	380	385	390	395	400	405	410	415	420	425	430	435	440	445	450	455	460	465	470	475	480	485	490	495	500	505	510	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	595	600	605	610	615	620	625	630	635	640	645	650	655	660	665	670	675	680	685	690	695	700	705	710	715	720	725	730	735	740	745	750	755	760	765	770	775	780	785	790	795	800	805	810	815	820	825	830	835	840	845	850	855	860	865	870	875	880	885	890	895	900	905	910	915	920	925	930	935	940	945	950	955	960	965	970	975	980	985	990	995	1000	1005	1010	1015	1020	1025	1030	1035	1040	1045	1050	1055	1060	1065	1070	1075	1080	1085	1090	1095	1100	1105	1110	1115	1120	1125	1130	1135	1140	1145	1150	1155	1160	1165	1170	1175	1180	1185	1190	1195	1200	1205	1210	1215	1220	1225	1230	1235	1240	1245	1250	1255	1260	1265	1270	1275	1280	1285	1290	1295	1300	1305	1310	1315	1320	1325	1330	1335	1340	1345	1350	1355	1360	1365	1370	1375	1380	1385	1390	1395	1400	1405	1410	1415	1420	1425	1430	1435	1440	1445	1450	1455	1460	1465	1470	1475	1480	1485	1490	1495	1500	1505	1510	1515	1520	1525	1530	1535	1540	1545	1550	1555	1560	1565	1570	1575	1580	1585	1590	1595	1600	1605	1610	1615	1620	1625	1630	1635	1640	1645	1650	1655	1660	1665	1670	1675	1680	1685	1690	1695	1700	1705	1710	1715	1720	1725	1730	1735	1740	1745	1750	1755	1760	1765	1770	1775	1780	1785	1790	1795	1800	1805	1810	1815	1820	1825	1830	1835	1840	1845	1850	1855	1860	1865	1870	1875	1880	1885	1890	1895	1900	1905	1910	1915	1920	1925	1930	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	2075	2080	2085	2090	2095	2100	2105	2110	2115	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195	2200	2205	2210	2215	2220	2225	2230	2235	2240	2245	2250	2255	2260	2265	2270	2275	2280	2285	2290	2295	2300	2305	2310	2315	2320	2325	2330	2335	2340	2345	2350	2355	2360	2365	2370	2375	2380	2385	2390	2395	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485	2490	2495	2500	2505	2510	2515	2520	2525	2530	2535	2540	2545	2550	2555	2560	2565	2570	2575	2580	2585	2590	2595	2600	2605	2610	2615	2620	2625	2630	2635	2640	2645	2650	2655	2660	2665	2670	2675	2680	2685	2690	2695	2700	2705	2710	2715	2720	2725	2730	2735	2740	2745	2750	2755	2760	2765	2770	2775	2780	2785	2790	2795	2800	2805	2810	2815	2820	2825	2830	2835	2840	2845	2850	2855	2860	2865	2870	2875	2880	2885	2890	2895	2900	2905	2910	2915	2920	2925	2930	2935	2940	2945	2950	2955	2960	2965	2970	2975	2980	2985	2990	2995	3000	3005	3010	3015	3020	3025	3030	3035	3040	3045	3050	3055	3060	3065	3070	3075	3080	3085	3090	3095	3100	3105	3110	3115	3120	3125	3130	3135	3140	3145	3150	3155	3160	3165	3170	3175	3180	3185	3190	3195	3200	3205	3210	3215	3220	3225	3230	3235	3240	3245	3250	3255	3260	3265	3270	3275	3280	3285	3290	3295	3300	3305	3310	3315	3320	3325	3330	3335	3340	3345	3350	3355	3360	3365	3370	3375	3380	3385	3390	3395	3400	3405	3410	3415	3420	3425	3430	3435	3440	3445	3450	3455	3460	3465	3470	3475	3480	3485	3490	3495	3500	3505	3510	3515	3520	3525	3530	3535	3540	3545	3550	3555	3560	3565	3570	3575	3580	3585	3590	3595	3600	3605	3610	3615	3620	3625	3630	3635	3640	3645	3650	3655	3660	3665	3670	3675	3680	3685	3690	3695	3700	3705	3710	3715	3720	3725	3730	3735	3740	3745	3750	3755	3760	3765	3770	3775	3780	3785	3790	3795	3800	3805	3810	3815	3820	3825	3830	3835	3840	3845	3850	3855	3860	3865	3870	3875	3880	3885	3890	3895	3900	3905	3910	3915	3920	3925	3930	3935	3940	3945	3950	3955	3960	3965	3970	3975	3980	3985	3990	3995	4000	4005	4010	4015	4020	4025	4030	4035	4040	4045	4050	4055	4060	4065	4070	4075	4080	4085	4090	4095	4100	4105	4110	4115	4120	4125	4130	4135	4140	4145	4150	4155	4160	4165	4170	4175	4180	4185	4190	4195	4200	4205	4210	4215	4220	4225	4230	4235	4240	4245	4250	4255	4260	4265	4270	4275	4280	4285	4290	4295	4300	4305	4310	4315	4320	4325	4330	4335	4340	4345	4350	4355	4360	4365	4370	4375	4380	4385	4390	4395	4400	4405	4410	4415	4420	4425	4430	4435	4440	4445	4450	4455	4460	4465	4470	4475	4480	4485	4490	4495	4500	4505	4510	4515	4520	4525	4530	4535	4540	4545	4550	4555	4560	4565	4570	4575	4580	4585	4590	4595	4600	4605	4610	4615	4620	4625	4630	4635	4640	4645	4650	4655	4660	4665	4670	4675	4680	4685	4690	4695	4700	4705	4710	4715	4720	4725	4730	4735	4740	4745	4750	4755	4760	4765	4770	4775	4780	4785	4790	4795	4800	4805	4810	4815	4820	4825	4830	4835	4840	4845	4850	4855	4860	4865	4870	4875	4880	4885	4890	4895	4900	4905	4910	4915	4920	4925	4930	4935	4940	4945	4950	4955	4960	4965	4970	4975	4980	4985	4990	4995	5000	5005	5010	5015	5020	5025	5030	5035	5040	5045	5050	5055	5060	5065	5070	5075	5080	5085	5090	5095	5100	5105	5110	5115	5120	5125	5130	5135	5140	5145	5150	5155	5160	5165	5170	5175	5180	5185	5190	5195	5200	5205	5210	5215	5220	5225	5230	5235	5240	5245	5250	5255	5260	5265	5270	5275	5280	5285	5290	5295	5300	5305	5310	5315	5320	5325	5330	5335	5340	5345	5350	5355	5360	5365	5370	5375	5380	5385	5390	5395	5400	5405	5410	5415	5420	5425	5430	5435	5440	5445	5450	5455	5460	5465	5470	5475	5480	5485	5490	5495	5500	5505	5510	5515	5520	5525	5530	5535	5540	5545	5550	5555	5560	5565	5570	5575	5580	5585	5590	5595	5600	5605	5610	5615	5620	5625	5630	5635	5640	5645	5650	5655	5660	5665	5670	5675	5680	5685	5690	5695	5700	5705	5710	5715	5720	5725	5730	5735	5740	5745	5750	5755	5760	5765	5770	5775	5780	5785	5790	5795	5800	5805	5810	5815	5820	5825	5830	5835	5840	5845	5850	5855	5860	5865	5870	5875	5880	5885	5890	5895	5900	5905	5910	5915	5920	5925	5930	5935	5940	5945	5950	5955	5960	5965	5970	5975	5980	5985	5990	5995	6000	6005	6010	6015	6020	6025	6030	6035	6040	6045	6050	6055	6060	6065	6070	6075	6080	6085	6090	6095	6100	6105	6110	6115	6120	6125	6130	6135	6140	6145	6150	6155	6160	6165	6170	6175	6180	6185	6190	6195	6200	6205	6210	6215	6220	6225	6230	6235	6240	6245	6250	6255	6260	6265	6270	6275	6280	6285	6290	6295	6300	6305	6310	6315	6320	6325	6330	6335	6340	6345	6350	6355	6360	6365	6370	6375	6380	6385	6390	6395	6400	6405	6410	6415	6420	6425	6430	6435	6440	6445	6450	6455	6460	6465	6470	6475	6480	6485	6490	6495	6500	6505	6510	6515	6520	6525	6530	6535	6540	6545	6550	6555	6560	6565	6570	6575	6580	6585	6590	6595	6600	6605	6610	6615	6620	6625	6630	6635	6640	6645	6650	6655	6660	6665	6670	6675	6680	6685	6690	6695	6700	6705	6710	6715	6720	6725	6730	6735	6740	6745	6750	6755	6760	6765	6770	6775	6780	6785	6790	6795	6800	6805	6810	6815	6820	6825	6830	6835	6840	6845	6850	6855	6860	6865	6870	6875	6880	6885	6890	6895	6900	6905	6910	6915	6920	6925	6930	6935	6940	6945
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8.7.2 Yield Tables for Unmanaged Immature Stands

Other unmanaged, immature deciduous and coniferous stands use the VDYP-generated base yield tables as described in the previous sections. Table 18 provides a breakdown of the extent of unmanaged immature stands in the TFL by leading species groups, site index or site index range and 5-year age class.

8.7.3 Existing Timber Volume Check

Table 19 provides a check of existing timber volume against that predicted at time zero by the yield curves for the volume-based timber supply analysis in the Fraser Block. This check is carried out to verify that no errors were made in aggregation and that no significant aggregation bias exists. The total volume of the current (starting) inventory using polygon specific volumes are compared to the total volume of the current inventory using analysis unit volumes.

TABLE 19
EXISTING TIMBER VOLUME CHECK

	Method Used	
	polygon specific	analysis unit
Total volume	207, 538 m ³	213, 071 m ³
% difference		+2.7

8.8 Yield Tables for Managed Stands

Intensively managed hybrid poplar pulpwood plantation volumes were generated using VDYP with a 1.3 volume adjustment factor (VAF) in the Fraser Block and 1.1 VAF in the Kingcome and Homathko Blocks. This level of volume adjustment in the Fraser Block is supported by the data collected from 3 permanent sample plots representing intensively managed hybrid poplar pulpwood plantations (see preliminary yield curve plots in Appendix V). This 30% increase is considered appropriate at this time given the limited amount of data and majority of it being for stands less than 15 years old. As more localized information is collected, appropriate adjustments will be made to the yield curves after discussion with Research Branch. All stands will be converted to high yielding poplar stands following logging.

Veneer Plantations in the Fraser Block were assigned an average volume of 390 m³/ha, regardless of age, as derived from inventory plot data. The stands represent some of the

earliest plantations on the Fraser Block and are widely spaced (16-18 feet) and are 40-50 years of age.

8.8.1 Silviculture Management Regimes

All of the operable area on the TFL will be converted to high yielding poplar stands with a target density of 900 well-spaced stems per ha with 500 stems per ha being the minimum acceptable stocking. Intensive site preparation and planting within one year (predominantly with improved stock) will be carried out on the Fraser Block and a combination of planted and natural stock will be used to restock logged areas within three years in the Homathko and Kingcome Blocks. Stand tending will take place to ensure that both planted and naturally regenerated stock is free-growing within the time specified in the Silviculture Prescriptions. Table 20 describes the silviculture management regime for the TFL as applied to the Fraser Block.

TABLE 20

SILVICULTURE MANAGEMENT REGIME FOR THE FRASER BLOCK

Analysis Unit	Leading Species/ Type Group	Natural (N) or Planted (P)	Yield Table Source
1	Nat. (Ac)	N	VDYP
2		N	
3		N	
4	Veneer Plantations	P	Cruise Plots
5	Pulpwood Hybrid Poplar (Ax)	P	1.3 * VDYP
6		P	
7	Coniferous	N	VDYP

Note: site index assignment by species is described in Section 8.1.

Current Site Degradation

Scott Paper's standard operating practices include the ripping and restocking of all landings and trails once logging has been completed. Consequently no allowance for current site degradation has been made.

Future Site Degradation

In keeping with current management objectives, all areas will be treated as required and immediately restocked following logging. Consequently, a provision for future site degradation is considered unnecessary at this time.

8.8.2 Aggregated Yield Tables

Aggregation of the base managed stand yield tables will be carried out as described in Section 8.6.2.

8.8.3 Regeneration Delay

The regeneration delay refers to the time elapsed between harvesting and establishment of new plantations on the TFL. New stands are established by planting unrooted cuttings immediately following harvesting. Table 21 indicates the regeneration delay period used for each block of the TFL. The prompt establishment of stands is critical for minimizing brush competition and for long-term productivity of hybrid poplars.

TABLE 21
REGENERATION DELAY PERIOD

TFL Block	Regeneration Delay (yrs)
Fraser	1
Homathko	3
Kingcome	3

In the Homathko and Kingcome Blocks, 3 years is the maximum time required for establishing new stands but usually 2 growing seasons are sufficient. In addition, natural regeneration is abundant in these areas particularly after winter or spring harvesting.

The current Not Sufficiently Restocked (NSR) statistics support the regeneration delay periods listed above. The total NSR area of 43.7 ha represents less than one year's harvest with the majority of this area logged in 1998 and, therefore, scheduled for reforestation in 1999. The review of MLSIS data also supports the use of the above regeneration delay periods.

In addition, it is Scott Paper Limited's management practice to plant partially logged cutblocks and plan harvesting activities to facilitate this partial planting prior to completion of harvesting.

8.8.4 Regeneration Assumptions

The volume-based analysis for the Fraser Block will use the regeneration assumptions outlined in Table 22. All harvested areas are planted with fast-growing hybrid poplar and the yield table assigned is 1.3 times the current VDYP yields for natural cottonwood.

TABLE 22
FRASER BLOCK - REGENERATION AFTER HARVESTING

Existing/ Regenerated Analysis Unit	Yield Table Number*	Regenerated Analysis Unit(s)	Regeneration Delay (yrs)	Yield Table Number*
1	1	5 or 6	1	5 or 6
2	2	5 or 6	1	5 or 6
3	3	5 or 6	1	5 or 6
4	4	5 or 6	1	5 or 6
5	5	5 or 6	1	5 or 6
6	6	5 or 6	1	5 or 6
7	7	5 or 6	1	5 or 6

*Yield Table Number = Analysis Unit as defined in Table 20.

8.8.5 Species Conversion

A small amount of non-productive brush type (NP BR) is converted on a yearly basis within the TFL Fraser Block as long as the area is contiguous to productive forest land that has been harvested. This area is site prepared in conjunction with the harvested area and planted. Scott Paper Limited expects to convert approximately 8 ha during the term of this Management Plan within the Fraser Block.

8.9 Silviculture History

8.9.1 Existing Managed and Unmanaged Immature

Table 18 (Immature Management Area by Age Class, Sect. 8.7.2) provides a breakdown of the extent of immature stands in the TFL by leading species groups, site index (or site index range) and 5-year age class.

8.9.2 Backlog and Current Non-Stocked Areas (NSR)

As of September 30, 1998, the total area of NSR amounted to 43.7 hectares. This area is current NSR and scheduled for planting in 1999. As shown in Table 23, there are no areas of backlog NSR in the TFL.

TABLE 23
NSR AREA IN TFL 43

TFL Block	Current	Backlog
Fraser	18.9	0.0
Homathko	4.8	0.0
Kingcome	20.0	0.0
Total	43.7	0.0

9.0 PROTECTION

9.1 Unsalvaged Losses

Significant unsalvaged losses on the TFL will be rare since access is highly developed on all three blocks. All losses have been, and will continue to be, accounted for by adjusting the area logged each year to include the area in which the loss was sustained.

10.0 INTEGRATED RESOURCE MANAGEMENT

10.1 Forest Resource Inventories

10.1.1 Visual Landscape Inventory

A portion of the Fraser Block is within the Highway 1 and Highway 7 known scenic area. A Visual Landscape Inventory was conducted for the Fraser Block in 1992. Table 24 summarizes the area assigned Visual Quality Objectives within this block. As can be seen, the highest proportion of the area was classified as Maximum Modification. This is largely attributable to the high Visual Absorption Capability (highly modified landscape consisting of agricultural, residential and utility corridors, gravel and sand bars, and riparian buffers around the perimeter of islands). The flat terrain within the floodplain along with generally flat viewing angles of short distance are also a consideration in the VQO assignment. The total area includes non-forest types such as stream channels, sandbars, sloughs and roads found within VQO polygons. The green area is the forested area which includes 150.1 ha of

non-productive brush (NP BR) that is found adjacent to the operable forest area. Non-forested areas have been deducted from the green area.

TABLE 24
LANDSCAPE INVENTORY AREA SUMMARY - FRASER BLOCK

TFL Block	Visual Quality Objective	Total Area (ha)	Green Area (ha) (Includes NP BR type)
Fraser	Partial Retention	91.3	91.3
Fraser	Maximum Modification	1 402.3	1 342.4
Total		1 493.6	1 433.7

Visual landscape inventories have not been carried out in the Homathko and Kingcome Blocks because these blocks are not visually significant or known scenic areas as they are remote and largely inaccessible to the general public.

10.1.2 Recreation Inventory

Table 25 provides a summary of the Recreation Inventory conducted in all three blocks in 1992. The recreation use of the Homathko and Kingcome Blocks is very limited due to remoteness and inaccessibility to the general public. In portions of the Fraser Block, recreation use is high but well dispersed and mostly occurs on the adjacent gravel and sand bars. The forested land usually has a heavy understorey of brush species thus limiting recreational use. The provision of maintaining access to these areas is of great importance.

The B1 areas are primarily associated with wildlife viewing and estuary areas. These areas have been classified as both Ew1 and Er2 and the more constraining netdown is applied. Consequently, these areas have already been removed from the productive forest land base. C1 areas have not been given an Er classification, nor will they be subject to a netdown for the purposes of the Timber Supply Analysis. Normal forest practices as per *FPC* regulations are permitted in areas classified as C2 and consequently no netdowns have been applied.

TABLE 25
RECREATION INVENTORY SUMMARY

TFL Block	Feature Significance	Management Class	Resource Opportunity Spectrum Class	Gross Area (ha)	Key Features	Key Activities	Comments
Fraser Block	B	1	3	9.3	Bar Fishing; Boating Nature Study; Floodplain Forests; Fraser River, Guided Fishing, Hunting	a, b, n, p, j	High concentration of use at selected locations; otherwise, highly dispersed recreation use with access the main consideration
	C	1	3	2074.7			
			4	54.4			
	C	2	3	1335.8			
			4	72.3			
Subtotal				3546.5			
Homathko Block	B	1	4	649.3	Fish Runs, Angling Opportunities; Wildlife; Floodplain Forests; Riparian Habitats; Extensive Wetlands	a, n, p, q	Guided fishing activities at selected areas
	C	1	3	76.4			
			4	1201.6			
	C	2	3	757.8			
			4	2918.7			
Subtotal				5603.8			
Kingcome Block	B	1	4	81.9	Fish Runs; Angling Opportunities; Wildlife; Floodplain Forests; Riparian Forests	a, n, p, q	Guided fishing activities at selected areas
	C	1	4	101.5			
	C	2	4	772.5			
Subtotal				955.9			
All Blocks	B	1	3	9.3			
			4	731.2			
	C	1	3	2151.1			
			4	1357.5			
	C	2	3	2093.6			
			4	3763.5			
TOTAL				10,106.2			

a – angling b – boating, sailing or windsurfing n – nature study
p – viewing q – wildlife viewing j – hunting

10.1.3 Forest Resources Inventory Status

Table 26 indicates the status of all non-timber resource inventories on TFL #43.

TABLE 26
FOREST RESOURCE INVENTORY STATUS

Non-timber Resource Inventory	Standard	Date Completed	Date Approved/Signed Off
Landscape Inventory	MoF	1992	1995/1999
Recreation Inventory	MoF	1992	1995/1999
Environmentally Sensitive Areas	MoF	1993	1999
Wildlife Inventory		1993	1995
Streams	DFO	1993	

10.2 Forest Cover Requirements - Area-based Analysis

Due to the nature of the area-based Allowable Annual Cut calculation, no forest cover requirements have been established for this TFL. A combination of land base reductions and operational cutblock scheduling will be used to fulfill the necessary forest cover requirements. A part of this decision is based on the knowledge that a substantial area (approximately 3058 ha or 49% of the productive land base) is already withdrawn from timber production to provide riparian, fisheries and wildlife habitat requirements along with the protection of environmentally sensitive areas and other protected areas. In addition, the conversion of the operable land within the TFL to intensively managed poplar plantations should result in a balanced age class structure for the TFL thus providing a full range of forest characteristics. The specific requirements with regards to visual quality objectives, recreation opportunity spectrum, winter ranges, forest ecosystem networks, adjacent cutblock green-up, landscape level biodiversity, wildlife tree patches, identified wildlife, higher level plans and other resource emphasis applicable to the area-based analysis are discussed below.

10.2.1 Visual Quality Objectives

The area-based analysis will not prescribe to the 15% denudation limit required by Partial Retention VQO. Since some of the VQO polygons are islands within the Fraser River, it is inefficient and impractical to adhere to the percent alteration limits. The compliance with the VQO will be achieved by providing visual screening through retention of riparian reserves, blending of harvesting with the extensively modified adjacent landscape and rapid green-up.

10.2.2 Recreation Opportunity Spectrum

No recreation opportunity spectrum requirements will be considered in the area-based analysis. The area within the TFL blocks is classified as Semi Primitive, Motorized or Roaded Resource Land. These designations are somewhat inaccurate given the lack of public access in Kingcome and Homathko Blocks and boat being the only access within portions of the Fraser Block.

10.2.3 Winter Ranges

There are no ungulate winter range areas within the TFL. The bald eagle nest sites have been removed from the productive forest via the environmentally sensitive area (Ew1) classification and any future nest or roost sites will be accommodated with area reductions.

10.2.4 Forest Ecosystem Networks

A Forest Ecosystem Network (FEN) has been designated for the Homathko Block and this area is excluded from the operable land base through the ESA designation. The declaration of the Lower Homathko Protected Area and additional areas as ESA classification for MP #4 has led to further enhancement of this FEN originally developed in MP #3. It is Scott Paper Limited's expectation that this area will be incorporated into the Landscape Unit planning process in the future and will be used to fulfill the old growth and wildlife tree retention requirements.

10.2.5 Adjacent Cutblock Green-Up

A green-up height of 3 meters will be used for both timber supply and operational purposes. Although this height will not be used for area based timber supply purposes, it will be incorporated into operational planning through cutblock scheduling to ensure fulfillment of this height requirement. Harvesting of adjacent cutblocks will proceed once previously harvested cutblocks have reached 3 metres in height and the stocking and block coverage requirements as specified in the operational planning regulations have been met. This height is normally achieved at the age of 3 years by stands of hybrid poplar/cottonwood in TFL #43.

10.2.6 Landscape-level Biodiversity

The biodiversity and Landscape Unit planning objectives will be addressed in the area-based analysis through the previously applied area reductions to the productive land base. The Landscape Unit planning process requirements will have unique implications for each block of the TFL given the characteristics of the area. The relatively small size along with the broken configuration of the TFL land base and the planned short rotation hybrid poplar management regime makes it difficult to implement these landscape level requirements. However, significant areas are reserved within the TFL and adjacent protected areas will be the foundation for satisfying landscape level biodiversity provisions. The Landscape Units and draft biodiversity emphasis options (BEO) applicable to each block of the TFL are as follows:

<u>TFL Block</u>	<u>Landscape Unit</u>	<u>Draft BEO</u>
Fraser	Fraser Valley South	Low
Homathko	Homathko	High
Kingcome	Lower Kingcome	Intermediate

The amount of older age classes within each block of the TFL is documented below. The current tables in the Biodiversity Guidebook do not define the age at which deciduous stands reach old seral stage thus further complicating the application of landscape level biodiversity

considerations. The specific application and implication of Landscape Unit planning and landscape level biodiversity for each block is discussed below.

Fraser Block

The forested land base within this block consists of homogeneous cottonwood/hybrid poplar stands. Over 90% of these stands are less than 50 years old. No further deductions have been applied to the Fraser Block given its past harvesting and silviculture history, the nature of intensively managed short rotation poplar plantations and the isolated islands that characterize the land base within the Fraser River flood plain. The implementation of the old seral stage requirements are further complicated by the uncertainty regarding the age that cottonwood/hybrid poplar stands meet this criterion. These factors result in little opportunity to set aside significant areas for landscape-level biodiversity particularly when considered within the context of the Fraser Valley South Landscape Unit. The TFL area represents approximately 1% of the total area within Fraser Valley South Landscape Unit.

A Fraser Lowland Protected Areas Strategy, which is a component of the Lower Mainland Protected Area Strategy, has tabled a report to cabinet recommending an additional 1 400 hectares of valley bottom areas be given protection. The Fraser Lowland Protected Areas along with existing protected areas such as F.H. Barber, Ecological Reserve #76, McGillivray Wildlife Reserve and Ferry Island Park will fulfill the landscape level biodiversity requirements with this block. The riparian reserves, inoperable, inaccessible, non-productive brush and ESAs within the TFL further augment these areas. This approach is acceptable to the Ministry of Environment, Lands and Parks and the company recognizes that the outcome of the Landscape Unit planning process may require minor modifications to operations within this block.

Homathko Block

No specific reductions in this block have been made for landscape level biodiversity requirements in this Information Package. The planning process for MP #3 identified vast areas within this block for grizzly bear habitat requirements on a landscape level. Currently, approximately 56% (2159.7 ha out of productive forest of 3884 ha (including PA)) of the productive forest is reserved from harvesting via the environmentally sensitive areas, inoperable, protected area, riparian reserves and non-commercial designations (see

Appendix II, operable land base determination for Homathko Block). Table 27 outlines the reserve and operable areas by age class. A total of 360.4 ha (10% of the total productive forest) of this reserve area is composed of age classes 7, 8 and 9 (greater than 121 years old) meaning that almost 80% of total area within these age classes is currently reserved from harvesting. The addition of age classes 5 and 6 increases this number to 536.3 ha or 15% of the productive forest land base. The inclusion of age classes 3 and 4 increases the reserves areas to 1 016.5 ha, which is 28% of the Homathko productive forest area. Scott Paper Limited anticipates no further reductions to the operable land from the Landscape Unit planning process in this portion of the TFL. The existing constrained areas represent a significant portion of the productive forest and were set aside with an overall context of the block area.

TABLE 27
RESERVED AND AVAILABLE AREA BY AGE CLASS WITHIN THE
HOMATHKO BLOCK

AGE CLASS	AREA (ha) CURRENTLY RESERVED FROM HARVESTING	AREA (ha) AVAILABLE FOR HARVESTING	TOTAL AREA IN AGE CLASS
9	191.6	12.1	203.7
8	149.9	54.1	204.0
7	18.9	30.4	49.3
5/ 6	175.9	185.7	361.6
3/4	480.2	825.3	1305.5
TOTAL	1016.5	1107.6	2124.2

Kingcome Block

This is the smallest block within the TFL and the land base is dispersed amongst other licences and protected areas within the Kingcome River flood plain. Here, the application of landscape-level requirements is extremely difficult given the above characteristics and the large amount of area currently reserved with this block. A total of 40% (310.7 ha out of 761 ha) of the productive land has been reserved within this block as ESAs, inoperable, riparian reserves and non-commercial land (Appendix II, Operable land base determination Kingcome Block). Approximately 4% of this area is older than 101 years of age (Age Class 6 and greater) and consists of mainly coniferous species leading stands. Table 28 provides a breakdown of the amount of reserve and available area by age class within the Kingcome Block. This area, along with Ecological Reserves 40A and 40B (412 ha) will be fulfill landscape level biodiversity requirements in this part of TFL #43.

TABLE 28
RESERVED AND AVAILABLE AREA BY AGE CLASS WITHIN THE
KINGCOME BLOCK

AGE CLASS	AREA (ha)		TOTAL AREA IN AGE CLASS
	CURRENTLY RESERVED FROM HARVESTING	AVAILABLE FOR HARVESTING	
7 - 9	8.2	0.0	8.2
6	22.6	44.5	67.0
5	13.0	45.9	58.9
4	129.0	269.5	398.5
3	51.5	44.4	95.8
2	44.1	28.7	72.8
TOTAL	268.4	432.9	701.2

*Riparian reserves have been included on a proportional basis

10.2.7 Wildlife Tree Retention (Wildlife Tree Patches)

The *FPC* Biodiversity Guidebook Table 20(a) recommends that a percentage of cutblocks that should be maintained as Wildlife Tree Patches (WTP) to provide stand structural attributes within a Landscape Unit. Scott Paper Limited has an extensive history of retaining wildlife trees within the riparian areas as part of normal management practices. The current Ministry of Forests and Ministry of Environment, Lands and Parks direction advocates that on the Coast, 75% of the (Wildlife Tree Retention) WTR requirements should be met through existing constrained areas. Scott Paper Limited believes that due to the unique attributes of the TFL, substantially more than 75% should be met through areas currently constrained within the TFL. A number of factors were weighed prior to proposing this approach which include: the amount of land base currently reserved within the TFL; the short rotation pulpwood management regime; the conversion of existing stands to poplar; the broken configuration of the land base; the fact that the TFL land base is a minor proportion of the Landscape Unit; and finally, that wildlife trees already exist within the riparian areas of previously harvested cutblocks. The specific application of WTRs to each block is described below.

In the Fraser Block, The Ministry of Environment, Lands and Parks has exempted the company from fulfilling the WTP requirements on areas previously planted with hybrid poplar. The objective is to ensure that WTR requirements are met within the natural cottonwood stands in this block of the TFL. With the exception of a few stands, natural cottonwood is found mainly on the smaller islands within this block. A number of these stands have been declared as inoperable and reserved from harvesting. For the operable natural cottonwood stands (approximately 35% of the operable land base), riparian reserves will largely fulfill WTR requirements. Thus, within this block 100% of the WTR requirements will be satisfied through the constrained areas.

In the Homathko Block, the Timber Supply Analysis will be carried out by applying a 3% reduction to the timber harvesting land base. The rationale for using 3% is that within the current Forest Development Plan approximately 3.4% of the WTP requirements are being provided by the timber harvesting land base. This number represents the highest percentage that would be required from the timber harvesting land base assuming that 75% of the WTR requirements are provided by the existing constrained land base.

In the Kingcome Block, 100% of the WTR requirements will be met through existing constrained areas. Due to the proximity of the operable land base to stream channels, riparian management area requirements will be of sufficient size to fulfill WTR requirements. This approach is substantiated by the approved Forest Development Plan as the current WTP requirements are entirely met with riparian reserves and other constrained areas.

If additional reserves are necessary, they will be addressed at the operational planning level.

10.2.8 Managing Identified Wildlife

The impact of the Identified Wildlife Management Strategy (IWMS) is uncertain at this time, although the maximum timber supply impact has been set at 1% of the mature timber harvesting land base. Since considerable constrained areas already exist within the TFL, these would be the first choice for wildlife management areas assuming they were

appropriate from a habitat perspective. Scott Paper Limited will follow the decisions and directives of the IWMS as they arise.

10.2.9 Higher Level Plans

No higher level plans have been approved for areas within the TFL.

10.2.10 Other Resource Emphasis

No other resource emphases are considered within the area-based Timber Supply Analysis.

10.3 Forest Cover Requirements - Fraser Block Volume-based Analysis

The volume-based analysis for the Fraser Block will include forest cover objectives for adjacency and visual quality. The Partial Retention (PR) VQO is represented in the COMPLAN model by limiting the amount of area disturbed to 15%. In essence, only 15% of the area with Partial Retention VQO can be less than 3 meters in height (equal to 3 years old) at any time within the management zone. The use of the 15% maximum allowable disturbance limit is largely due to the relatively flat topography of the area, deciduous forest cover, the heavily modified surrounding landscape of farmland, residential areas, utility corridors and river gravel bars resulting in high visual absorption capability. The model is provided with an age of 3 years for green-up due to the unreliability of yield curves to predict this at such young ages. The model has the ability to track individual polygons within the zone to determine if the prescribed objectives are being met. Another harvest forecast will be shown where the model will be forced to harvest a whole island with a PR VQO since it is not possible to sub-divide the island at an operational level. Although the percent alteration will be exceeded in this scenario, VQO objectives will be met as riparian reserves around the perimeter of the island will provide a visual screening of harvesting, green-up will be rapid and cutblocks will be blended into their surroundings.

The adjacency green-up forest cover requirements are applied by ensuring that once stands have reached 3 metres of height, adjacent stands can be harvested. The model is provided with an age of 3 years to reach 3 metres in height. Due to the spatial nature of COMPLAN,

a maximum area of 40 ha is allowed in non-greened-up condition in order to ensure compliance with maximum cutblock size requirements.

The regeneration delay period is incorporated separately through the underlying growth and yield tables used by the model.

10.3.1 Forest Cover Objectives - Rationale

The rationale for each forest cover objectives reported on in the Fraser Block volume-based timber analysis is described in the sections below. The rationales are based on the unique attributes of the TFL.

10.3.2 Visual Quality Objectives

The only Visual Quality Objective that will be modeled in the Timber Supply analysis is Partial Retention as this is considered to constrain the timber supply. The remaining area is assigned a Maximum Modification (MM) VQO and the amount of area that can be disturbed at any one time is 40%. This level of disturbance is considered non-constraining to the timber supply.

The Partial Retention maximum disturbance limit of 15% will be used for the Analysis given the high visual absorption capability due to relatively flat topography of the area, rapid growth of hybrid poplar/cottonwood, deciduous vegetation, the surrounding landscape of farmland and river gravel bars in an urban setting. Another important factor considered in this decision is the retention of riparian reserves around the perimeter of the islands, which will lessen the visual impact of the harvesting through visual screening. A 3 meter VEG height is used because of the flat topography of the TFL lands (see sect. 7.1 for discussion). The use of 3 meters for VEG height is consistent with the direction outlined in the publication *Procedures for Factoring Visual Resources into Timber Supply Analyses* (MoF Forest Practices and Timber Supply Branch, March 1998). This green-up age does not include regeneration delays which are accounted for separately in the growth and yield model. A sensitivity analysis will be undertaken to determine the significance of the green-up and its impact on harvest levels.

10.3.3 Recreation Opportunity Spectrum

There is an inherent difficulty in applying the recreation opportunity spectrum (ROS) classes to areas within the TFL given the unique characteristics such as boat-only access in the Fraser Block. The areas within the Fraser Block of the TFL are Semi-primitive, Motorized and Roaded Resource Land. No forest cover constraints will be applied to model the recreation objectives within this block. The vast majority of the recreation features are associated with the rivers and these areas have been classified as fisheries or wildlife sensitive areas.

10.3.4 Winter Range

There are no ungulate winter range areas within TFL #43.

10.3.5 Forest Ecosystem Networks

No Forest Ecosystem Networks (FENs) have been designated for the Fraser Block due to the broken configuration of the TFL land base within this drainage. The nature of TFL lands within this block does not accommodate the fulfillment of connectivity which is one of the key objectives of a FEN. The TFL lands are isolated islands within the Fraser River flood plain and adjacent to a highly modified landscape consisting of agricultural and residential areas.

10.3.6 Adjacent Cutblock Green-up

The volume-based Timber Supply Analysis uses a 3 m height for adjacency green-up requirements. Typically the time required for stands to reach this height is 3 years. Once stands reach 3 years of age, adjacent stands can be harvested within the model. The use of 3 years is supported by regeneration/survival survey results which indicate that hybrid poplar/cottonwood exhibit rapid early growth.

10.3.7 Landscape Level Biodiversity

The implementation of the landscape-level biodiversity requirements is cumbersome on this block given the management regime of short-rotation poplar pulpwood, the fragmented

nature of the land base, the predominantly deciduous cover and the fact that the TFL is a minor component of the individual Landscape Unit.

Landscape-level biodiversity requirements will not be applied in the Fraser Block due to the intensively managed short-rotation poplar plantations, the past harvesting and silviculture history, and the fact that the block is composed of isolated islands within the Fraser flood plain. These factors result in little opportunity to set aside areas particularly when combined with the fact that the TFL is a small portion of the Fraser Valley South Landscape Unit. Refer to detailed discussion under the area-based analysis in sect. 10.2.6.

10.3.8 Reductions to Reflect Volume Retention in Cutblocks

No reductions will be applied to reflect volume retention within cutblocks except those previously used to reduce the operable land base. The Wildlife Tree Patches will be incorporated into riparian reserves or other constrained areas. The Riparian Management Zone, in virtually all situations, will be clearcut with the key habitat areas being retained adjacent to the channels. If additional reserves are necessary, they will be addressed at the operational planning level.

10.3.9 Managing Identified Wildlife

Significant wildlife habitat areas have been excluded from the operable land base via the environmentally sensitive area classification. No other requirements will be included within the volume-based analysis.

10.3.10 Community Watersheds

There are no community watersheds within the TFL and therefore no objectives or modeling procedures will be provided.

10.3.11 Higher Level Plans

No higher level plans are in place at this time.

10.4 Timber Harvesting

10.4.1 Minimum Merchantability Standards

Because the wood on this TFL is being fully utilized and the AAC is area-based rather than volume-based, minimum merchantability standards have not been set other than the harvesting ages for poplar stands of 25 years in the Fraser Block and 30 years in the Homathko and Kingcome Blocks. All species logged during the conversion period will be utilized to the fullest extent possible under the current utilization standards.

Table 17 (Operable Land Base by Age Class and Mature Volumes, sect. 8.7.1) summarizes the nature of the wood supply on the operable land base. It shows that 93% of this area is occupied by deciduous species, more than 50% of which is already mature or overmature. Of the 6% occupied by conifer leading stands, 30% are mature stands and the remaining area consists of older immature stands. The timber management objective of this TFL is to convert all the operable land base to high-yielding poplar stands as soon as possible, consistent with the age of maturity of the existing stock and the desire to create a balanced age class distribution. The desired tree characteristics are: a minimum of 60-point reflectance-meter base wood fibre brightness; an approximate average tree size of 35 cm diameter at breast height age; and 30 m in height at rotation age (current rotation is planned at 25 years in the Fraser Block and 30 years in the Homathko and Kingcome Blocks).

10.4.2 Operability

All of the TFL has been and will continue to be logged by conventional skidding methods. A portion of the Homathko Block (adjacent to Heakamie and Jewakwa Rivers) has been classified as Economically Inoperable (EI) as the access costs (mainly for bridge crossings) are much greater than the timber values found in this area. If suitable cost-sharing arrangements can be negotiated with other licensees in the area and/or significant increase in timber values are realized, this area will be added to the operable land base within the TFL.

10.4.3 Initial Harvest Rate

The initial harvest rate will be based on the current area conversion rates. The initial harvest rate for the Fraser Block volume analysis will be determined by using the COMPLAN

binary search algorithm to calculate the non-declining even flow harvest level for the TFL without any forced harvesting. The objective will be to attain the volumetric equivalent of converted area.

10.4.4 Harvest Rules

The harvest is being sequenced based on 2 rules:

- Minimize growth loss
- Oldest first

The minimize growth loss rule helps to ensure that the slowest growing stands are harvested first. Salvage harvesting of useable dead or damaged stands along with stands at risk from erosion will take precedence over other stands. Following this, harvesting of older age classes will be given priority. In addition, where feasible, harvesting of the low quality and grade alder and coniferous species will be targeted during periods of favorable log market conditions.

10.4.5 Harvest Profile

In accordance with the timber management objective of converting all of the operable land base to high-yielding, short-rotation poplar stands with a balanced age class distribution, Scott Paper will continue to harvest the full profile and utilize or sell as much of the wood as economically feasible.

10.4.6 Silvicultural Systems

All blocks are managed with a clearcut silviculture system.

10.4.7 Harvest Flow Objectives

The objective of the volume-based analysis in the Fraser Block is to have a generally non-declining evenflow harvest over the 75-year planning horizon. In fact, the conversion of low grade stands to fast-growing hybrid poplar/cottonwood plantations should allow the harvest

to increase in the medium term. There will be some variation in the harvest level in the first five-year period because of the need to incorporate the existing Forest Development Plan.

Although timber supply cannot be reliably modeled at present due to the lack of site-specific yield curves, it is expected that the yield from second growth stands will be significantly higher than from existing stands as a result of the replacement of relatively low quality stands with fast-growing, short-rotation hybrid poplar stands.

APPENDICES

APPENDIX I
DETAILED AREA AND VOLUME SUMMARIES

AREA AND VOLUME BY LEADING SPECIES GROUP AND AGE CLASS
FRASER

Leading Species and SI	Ageclass													Mature Area	Immature Area	Total Area	Volume
	5	10	15	20	25	30	35	40	45	50	55	60					
Ac SI 32																	
Ac SI 34																	
Ac SI 35			3.2		27.8	9.3	2.1	33.5	17.9					55.2	38.5	93.7	13,349
Ac SI 36																	
Ac SI 37																	
Ac SI 40																	
Ac SI 45		38.9		74.0	34.4	27.8	67.6	16.6	61.9	30.9	2.6		6.9	189.3	172.2	361.5	81,530
Ac SI 49		140.2	116.9	117.0	95.5	59.4	11.2	67.0	65.1					143.3	529.0	672.3	87,486
Subtotal AC		179.1	120.1	191.0	157.6	96.6	80.9	117.1	144.9	30.9	2.6		6.9	387.8	739.7	1127.5	182,364
Dr SI 16																	
Dr SI 25																	
Dr SI 32																	
Dr SI 34																	
Dr SI 37																	
Dr SI 45																	
Subtotal Dr																	
Other Deciduous SI 13																	
Other Deciduous SI 22																	
Other Deciduous SI 28																	
Other Deciduous SI 36																	
Other Deciduous SI 37																	
Subtotal Other Decid.																	
Conifer SI 15-20																	
Conifer SI 21-25																	
Conifer SI 26-30											6.4				6.4	6.4	1,579
Conifer SI 31-35																	
Subtotal Conifer											6.4				6.4	6.4	1,579
NSR	18.0															18.0	
Total		179.1	120.1	191.0	157.6	96.6	80.9	117.1	144.9	30.9	9.0		6.9	387.8	746.1	1151.9	183,944

AREA AND VOLUME BY LEADING SPECIES GROUP AND AGE CLASS
HOMATHKO

Leading Species	Age Class	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	360	365	370	375	380	385	390	395	400	405	410	415	420	425	430	435	440	445	450	455	460	465	470	475	480	485	490	495	500	505	510	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	595	600	605	610	615	620	625	630	635	640	645	650	655	660	665	670	675	680	685	690	695	700	705	710	715	720	725	730	735	740	745	750	755	760	765	770	775	780	785	790	795	800	805	810	815	820	825	830	835	840	845	850	855	860	865	870	875	880	885	890	895	900	905	910	915	920	925	930	935	940	945	950	955	960	965	970	975	980	985	990	995	1000	1005	1010	1015	1020	1025	1030	1035	1040	1045	1050	1055	1060	1065	1070	1075	1080	1085	1090	1095	1100	1105	1110	1115	1120	1125	1130	1135	1140	1145	1150	1155	1160	1165	1170	1175	1180	1185	1190	1195	1200	1205	1210	1215	1220	1225	1230	1235	1240	1245	1250	1255	1260	1265	1270	1275	1280	1285	1290	1295	1300	1305	1310	1315	1320	1325	1330	1335	1340	1345	1350	1355	1360	1365	1370	1375	1380	1385	1390	1395	1400	1405	1410	1415	1420	1425	1430	1435	1440	1445	1450	1455	1460	1465	1470	1475	1480	1485	1490	1495	1500	1505	1510	1515	1520	1525	1530	1535	1540	1545	1550	1555	1560	1565	1570	1575	1580	1585	1590	1595	1600	1605	1610	1615	1620	1625	1630	1635	1640	1645	1650	1655	1660	1665	1670	1675	1680	1685	1690	1695	1700	1705	1710	1715	1720	1725	1730	1735	1740	1745	1750	1755	1760	1765	1770	1775	1780	1785	1790	1795	1800	1805	1810	1815	1820	1825	1830	1835	1840	1845	1850	1855	1860	1865	1870	1875	1880	1885	1890	1895	1900	1905	1910	1915	1920	1925	1930	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	2075	2080	2085	2090	2095	2100	2105	2110	2115	2120	2125	2130	2135	2140	2145	2150	2155	2160	2165	2170	2175	2180	2185	2190	2195	2200	2205	2210	2215	2220	2225	2230	2235	2240	2245	2250	2255	2260	2265	2270	2275	2280	2285	2290	2295	2300	2305	2310	2315	2320	2325	2330	2335	2340	2345	2350	2355	2360	2365	2370	2375	2380	2385	2390	2395	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485	2490	2495	2500	2505	2510	2515	2520	2525	2530	2535	2540	2545	2550	2555	2560	2565	2570	2575	2580	2585	2590	2595	2600	2605	2610	2615	2620	2625	2630	2635	2640	2645	2650	2655	2660	2665	2670	2675	2680	2685	2690	2695	2700	2705	2710	2715	2720	2725	2730	2735	2740	2745	2750	2755	2760	2765	2770	2775	2780	2785	2790	2795	2800	2805	2810	2815	2820	2825	2830	2835	2840	2845	2850	2855	2860	2865	2870	2875	2880	2885	2890	2895	2900	2905	2910	2915	2920	2925	2930	2935	2940	2945	2950	2955	2960	2965	2970	2975	2980	2985	2990	2995	3000	3005	3010	3015	3020	3025	3030	3035	3040	3045	3050	3055	3060	3065	3070	3075	3080	3085	3090	3095	3100	3105	3110	3115	3120	3125	3130	3135	3140	3145	3150	3155	3160	3165	3170	3175	3180	3185	3190	3195	3200	3205	3210	3215	3220	3225	3230	3235	3240	3245	3250	3255	3260	3265	3270	3275	3280	3285	3290	3295	3300	3305	3310	3315	3320	3325	3330	3335	3340	3345	3350	3355	3360	3365	3370	3375	3380	3385	3390	3395	3400	3405	3410	3415	3420	3425	3430	3435	3440	3445	3450	3455	3460	3465	3470	3475	3480	3485	3490	3495	3500	3505	3510	3515	3520	3525	3530	3535	3540	3545	3550	3555	3560	3565	3570	3575	3580	3585	3590	3595	3600	3605	3610	3615	3620	3625	3630	3635	3640	3645	3650	3655	3660	3665	3670	3675	3680	3685	3690	3695	3700	3705	3710	3715	3720	3725	3730	3735	3740	3745	3750	3755	3760	3765	3770	3775	3780	3785	3790	3795	3800	3805	3810	3815	3820	3825	3830	3835	3840	3845	3850	3855	3860	3865	3870	3875	3880	3885	3890	3895	3900	3905	3910	3915	3920	3925	3930	3935	3940	3945	3950	3955	3960	3965	3970	3975	3980	3985	3990	3995	4000	4005	4010	4015	4020	4025	4030	4035	4040	4045	4050	4055	4060	4065	4070	4075	4080	4085	4090	4095	4100	4105	4110	4115	4120	4125	4130	4135	4140	4145	4150	4155	4160	4165	4170	4175	4180	4185	4190	4195	4200	4205	4210	4215	4220	4225	4230	4235	4240	4245	4250	4255	4260	4265	4270	4275	4280	4285	4290	4295	4300	4305	4310	4315	4320	4325	4330	4335	4340	4345	4350	4355	4360	4365	4370	4375	4380	4385	4390	4395	4400	4405	4410	4415	4420	4425	4430	4435	4440	4445	4450	4455	4460	4465	4470	4475	4480	4485	4490	4495	4500	4505	4510	4515	4520	4525	4530	4535	4540	4545	4550	4555	4560	4565	4570	4575	4580	4585	4590	4595	4600	4605	4610	4615	4620	4625	4630	4635	4640	4645	4650	4655	4660	4665	4670	4675	4680	4685	4690	4695	4700	4705	4710	4715	4720	4725	4730	4735	4740	4745	4750	4755	4760	4765	4770	4775	4780	4785	4790	4795	4800	4805	4810	4815	4820	4825	4830	4835	4840	4845	4850	4855	4860	4865	4870	4875	4880	4885	4890	4895	4900	4905	4910	4915	4920	4925	4930	4935	4940	4945	4950	4955	4960	4965	4970	4975	4980	4985	4990	4995	5000	5005	5010	5015	5020	5025	5030	5035	5040	5045	5050	5055	5060	5065	5070	5075	5080	5085	5090	5095	5100	5105	5110	5115	5120	5125	5130	5135	5140	5145	5150	5155	5160	5165	5170	5175	5180	5185	5190	5195	5200	5205	5210	5215	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**AREA AND VOLUME BY LEADING SPECIES GROUP AND AGE CLASS
KINGCOME**

Leading Species and SI	Ageclass															Mature Area	Immature Area	Total Area	Volume
	<5	5	25	35	40	45	55	65	75	85	90	95	105	125	175				
Ac SI 32																			
Ac SI 34																			
Ac SI 35																			
Ac SI 36		19.9															19.9	19.9	
Ac SI 37																			
Ac SI 40			5.9	9.3	15.4	7.9	137.9	40.0	2.3			11.1	4.8			232.8	5.9	244.1	120,054
Ac SI 45		9.7		5.0	2.7							1.5				9.3	9.7	19.0	2,894
Ac SI 49																			
Subtotal AC		29.6	5.9	14.3		18.1	7.9	137.9	40.0	2.3		12.6	4.8			242.1	35.5	283.0	122,948
Dr SI 16																			
Dr SI 25			15.2	4.7	7.9	2.9	6.8	0.7								23.2	15.2	38.4	9,689
Dr SI 32																			
Dr SI 34						0.8	19.0	9.7								29.6		29.6	15,473
Dr SI 37																			
Dr SI 45		13.3															13.3	13.3	
Subtotal Dr		13.3	15.2	4.7		7.9	3.8	25.8	10.5							52.8	28.5	81.3	25,162
Other Deciduous SI 13																			
Other Deciduous SI 22																			
Other Deciduous SI 28																			
Other Deciduous SI 36																			
Other Deciduous SI 37																			
Subtotal Other Decid.																			
Conifer SI 15-20																			174
Conifer SI 21-25			0.6							9.1							9.7	9.7	7,698
Conifer SI 26-30		12.7							4.0		13.0		24.9	0.8	0.1	0.9	54.6	55.6	34,873
Conifer SI 31-35													3.9				3.9	3.9	3,091
Subtotal Conifer		12.7	0.6						4.0	9.1	13.0		28.8	0.8	0.1	0.9	68.2	69.2	45,837
NSR	16.6																	16.6	
Total		55.6	21.6	19.0		26.0	11.6	163.7	54.5	11.4	13.0	12.6	33.6	0.8	0.1	295.8	132.2	450.1	193,947

APPENDIX II
OPERABLE LAND BASE DETERMINATION BY BLOCK

OPERABLE LAND BASE DETERMINATION - FRASER

Classification	Area (ha)			Mature Vol. (m3)		
	Schedule A	Schedule B	Total	Schedule A	Schedule B	Total
Total Area	1223.8	2322.7	3546.5	111,950	101,122	213,071
Less: Protected Areas	0.0	0.0	0.0	0	0	0
Less: Non Forest	426.1	1381.5	1807.6	0	0	0
Less: Non-Productive Forest Land	0.0	0.0	0.0	0	0	0
Total Productive Forest	797.7	941.2	1738.9	111,950	101,122	213,071
Reductions to Total Productive Forest						
Non Commercial Land (NP BR)	114.0	324.8	438.8	0	0	0
Inoperable / Inaccessible	10.6	43.3	53.9	2,231	6,763	8,995
Environmentally Sensitive Area 1 (98 %)	4.0	5.7	9.7	1,759	2,332	4,091
Environmentally Sensitive Area 2 (50 %)	0.0	0.0	0.0	0	0	0
Riparian Reserves (RIP)	9.9	14.1	24.0	3,152	3,546	6,698
Riparian Reserves (Buffer)	31.0	25.4	56.4	1,800	1,480	3,280
Grizzly Bear Habitat	0.0	0.0	0.0	0	0	0
Heritage	0.0	0.0	0.0	0	0	0
Unclassified Roads, Trails and Landings	4.2	0.0	4.2	270	0	270
Total Reductions to Productive Forest	173.8	413.3	587.1	9,212	14,122	23,334
Less: Volume Reductions	0.0	0.0	0.0	0	0	0
Total Reduced Land Base	623.9	527.9	1151.9	102,738	86,999	189,737
Less: Low Site Areas	0.0	0.0	0.0	0	0	0
Less: Not Sufficiently Restocked Areas	1.0	18.0	18.9	0	0	0
Additions to Reduced Landbase						
Add: Not Sufficiently Restocked Areas	1.0	18.0	18.9	0	0	0
Timber Harvesting Land Base	623.9	527.9	1151.9	102,738	86,999	189,737
Less: Future Roads	0.0	0.0	0.0	0	0	0
Less: Future Site Degradation	0.0	0.0	0.0	0	0	0
Total Long Term Land Base	623.9	527.9	1151.9			
Total Long Term Volume				102,738	86,999	189,737

OPERABLE LAND BASE DETERMINATION - HOMATHKO

Classification	Area (ha)			Mature Vol (m ³)		
	Schedule A	Schedule B	Total	Schedule A	Schedule B	Total
Total Area	0.0	5603.8	5603.8	0	981,458	981,458
Less: Protected Areas	0.0	231.0	231.0	0	79,776	79,776
Less: Non Forest	0.0	1719.9	1719.9	0	0	0
Less: Non-Productive Forest Land	0.0	0.0	0.0	0	0	0
Total Productive Forest	0.0	3652.9	3652.9	0	901,682	901,682
Reductions to Total Productive Forest						
Non Commercial Land (NP BR)	0.0	288.5	288.5	0	0	0
Inoperable / Inaccessible	0.0	687.6	687.6	0	184,198	184,198
Environmentally Sensitive Area 1 (98 %)	0.0	830.8	830.8	0	337,260	337,260
Environmentally Sensitive Area 2 (50 %)	0.0	52.7	52.7	0	28,147	28,147
Riparian Reserves (RIP)	0.0	0.0	0.0	0	0	0
Riparian Reserves (Buffer)	0.0	60.0	60.0	0	15,213	15,213
Grizzly Bear Habitat	0.0	0.0	0.0	0	0	0
Heritage	0.0	0.0	0.0	0	0	0
Unclassified Roads, Trails and Landings	0	9.1	9.1	0	2,307	2,307
Total Reductions to Productive Forest	0.0	1928.7	1928.7	0	567,126	567,126
Less: Volume Reductions	0.0	0.0	0.0	0	0	0
Total Reduced Land Base	0.0	1724.1	1724.1	0	334,556	334,556
Less: Low Site Areas	0.0	0.0	0.0	0	0	0
Less: Not Sufficiently Restocked Areas	0.0	4.8	4.8	0	0	0
Additions to Reduced Landbase						
Add: Not Sufficiently Restocked Areas	0.0	4.8	4.8	0	0	0
Timber Harvesting Land Base	0.0	1724.1	1724.1	0	334,556	334,556
Less: Future Roads (1%)	0.0	17.2	17.2	0	3,346	3,346
Less: Future Site Degradation	0.0	0.0	0.0	0	0	0
Total Long Term Land Base	0.0	1706.9	1706.9			
Total Long Term Volume				0	331,210	331,210

OPERABLE LAND BASE DETERMINATION - KINGCOME

Classification	Area (ha)			Mature Vol (m3)		
	Schedule A	Schedule B	Total	Schedule A	Schedule B	Total
Total Area	0.0	955.9	955.9	0	318,759	318,759
Less: Protected Areas	0.0	0.0	0.0	0	0	0
Less: Non Forest	0.0	195.1	195.1	0	0	0
Less: Non-Productive Forest Land	0.0	0.0	0.0	0	0	0
Total Productive Forest	0.0	760.8	760.8	0	318,759	318,759
Reductions to Total Productive Forest						
Non Commercial Land (NP BR)	0.0	27.3	27.3	0	0	0
Inoperable / Inaccessible	0.0	66.4	66.4	0	31,955	31,955
Environmentally Sensitive Area 1 (98 %)	0.0	125.5	125.5	0	53,194	53,194
Environmentally Sensitive Area 2 (50 %)	0.0	0.0	0.0	0	0	0
Riparian Reserves (RIP)	0.0	0.0	0.0	0	0	0
Riparian Reserves (Buffer)	0.0	89.4	89.4	0	37,457	37,457
Grizzly Bear Habitat	0.0	0.0	0.0	0	0	0
Heritage	0.0	0.0	0.0	0	0	0
Unclassified Roads, Trails and Landings	0.0	2.0	2.0		839	839
Total Reductions to Productive Forest	0.0	310.7	310.7	0	123,444	123,444
Less: Volume Reductions	0.0	0.0	0.0	0	0	0
Total Reduced Land Base	0.0	450.1	450.1	0	195,315	195,315
Less: Low Site Areas	0.0	0.0	0.0	0	0	0
Less: Not Sufficiently Restocked Areas	0.0	20.0	20.0	0	0	0
Additions to Reduced Landbase						
Add: Not Sufficiently Restocked Areas	0.0	20.0	20.0	0	0	0
Timber Harvesting Land Base	0.0	450.1	450.1	0	195,315	195,315
Less: Future Roads (1%)	0.0	4.5	4.5	0	1,953	1,953
Less: Future Site Degradation	0.0	0.0	0.0	0	0	0
Total Long Term Land Base	0.0	445.6	445.6			
Total Long Term Volume				0	193,362	193,362

APPENDIX III
VDYP YIELD TABLES USED TO UPDATE KINGCOME INVENTORY

KINGCOME stratum 1

Stand Volume and Diameter Table, Air Method
 Poplar 48.0%, Alder 21.0%, Sitka Spruce 19.0%
 Western Hemlock 5.0%, Western Red Cedar 5.0%, Amabilis Fir 2.0%

VOLUMES ARE PER HECTARE QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 17.5+ VOLUME: 192.5 AGE: 37 MAI: 6.03
 LIMIT: 22.5+ VOLUME: 189.3 AGE: 43 MAI: 5.22

CLOSE UTILIZATION LESS DECAY, WASTE 2 & BREAKAGE VOLUME

(17.5 cm+)				(22.5 cm+)											
AGE	HT	DIA	VOL	MAI	DIA	VOL	MAI								
(yrs)	(m)	(cm)	(m3/ha)	(m3/ha/yr)	(cm)	(m3/ha)	(m3/ha/yr)								
10	10.9	22.7	2.1	0.21	25.5	1.2	0.12	42	36.5	33.5	213.3	5.08	35.9	184.8	4.40
11	12.2	23.3	2.5	0.23	25.9	1.7	0.15	43	36.9	33.8	217.5	5.06	36.2	189.3	4.40
12	13.5	24.0	3.4	0.29	26.4	2.5	0.20	44	37.3	34.2	221.7	5.04	36.5	193.8	4.40
13	14.7	24.6	5.2	0.40	26.8	3.9	0.30	45	37.7	34.6	225.7	5.01	36.8	198.0	4.40
14	15.9	25.2	7.1	0.51	27.2	5.5	0.39	46	38.1	34.9	229.5	4.99	37.2	202.2	4.40
15	17.1	23.3	13.4	0.89	27.6	7.2	0.48	47	38.4	35.3	233.2	4.96	37.5	206.3	4.39
16	18.3	23.9	22.7	1.42	27.9	9.2	0.57	48	38.7	35.6	236.8	4.93	37.8	210.2	4.38
17	19.4	24.2	31.6	1.86	27.8	15.9	0.94	49	39.1	35.9	240.3	4.90	38.1	214.1	4.37
18	20.4	24.7	40.2	2.24	28.2	24.2	1.35	50	39.4	36.3	243.6	4.87	38.4	217.8	4.36
19	21.4	25.3	48.3	2.54	28.7	31.9	1.68	51	39.7	36.6	246.9	4.84	38.7	221.5	4.34
20	22.4	24.7	60.9	3.04	29.1	39.1	1.95	52	40.0	37.0	250.0	4.81	39.0	225.0	4.33
21	23.4	25.1	73.7	3.51	28.9	47.5	2.26	53	40.3	37.3	253.1	4.77	39.3	228.5	4.31
22	24.3	25.6	85.3	3.88	29.2	57.2	2.60	54	40.6	37.6	256.0	4.74	39.6	231.9	4.29
23	25.1	26.0	95.9	4.17	29.5	66.7	2.90	55	40.8	38.0	258.9	4.71	39.9	235.2	4.28
24	26.0	26.5	105.8	4.41	29.9	75.5	3.15	56	41.1	38.3	261.6	4.67	40.2	238.4	4.26
25	26.8	26.9	115.1	4.60	30.3	83.8	3.35	57	41.4	38.6	264.3	4.64	40.5	241.6	4.24
26	27.5	27.3	123.8	4.76	30.4	92.2	3.55	58	41.6	39.0	266.9	4.60	40.8	244.7	4.22
27	28.3	27.7	131.9	4.89	30.8	100.4	3.72	59	41.8	39.3	269.5	4.57	41.1	247.7	4.20
28	29.0	28.1	139.6	4.99	31.1	108.2	3.86	60	42.1	39.6	271.9	4.53	41.3	250.6	4.18
29	29.7	28.6	146.9	5.07	31.5	115.5	3.98	61	42.3	39.9	273.9	4.49	41.6	252.6	4.14
30	30.3	29.0	153.7	5.12	31.9	122.5	4.08	62	42.5	40.1	275.7	4.45	41.8	254.6	4.11
31	31.0	29.4	160.2	5.17	32.2	129.1	4.17	63	42.7	40.4	277.5	4.41	42.1	256.5	4.07
32	31.6	29.7	166.4	5.20	32.6	135.4	4.23	64	42.9	40.7	279.3	4.36	42.3	258.3	4.04
33	32.2	30.1	172.2	5.22	32.9	141.4	4.28	65	43.1	40.9	281.0	4.32	42.5	260.1	4.00
34	32.7	30.5	177.7	5.23	33.2	147.1	4.33	66	43.3	41.2	282.7	4.28	42.8	261.8	3.97
35	33.3	30.9	182.9	5.22	33.6	152.5	4.36	67	43.5	41.4	284.3	4.24	43.0	263.5	3.93
36	33.8	31.3	187.8	5.22	33.9	157.6	4.38	68	43.7	41.7	285.9	4.20	43.2	265.1	3.90
37	34.3	31.6	192.5	5.20	34.3	162.5	4.39	69	43.9	41.9	287.4	4.17	43.4	266.7	3.87
38	34.8	32.0	196.9	5.18	34.6	167.2	4.40	70	44.1	42.2	288.9	4.13	43.7	268.3	3.83
39	35.2	32.4	201.1	5.16	34.9	171.7	4.40	71	44.2	42.4	290.3	4.09	43.9	269.8	3.80
40	35.7	32.8	205.1	5.13	35.2	176.0	4.40	72	44.4	42.7	291.7	4.05	44.1	271.3	3.77
41	36.1	33.1	208.8	5.09	35.6	180.1	4.39	73	44.6	42.9	293.1	4.02	44.3	272.7	3.74
								74	44.7	43.1	294.5	3.98	44.6	274.1	3.70
								75	44.9	43.4	295.8	3.94	44.8	275.5	3.67
								76	45.0	43.6	297.0	3.91	45.0	276.8	3.64
								77	45.2	43.9	298.3	3.87	45.2	278.1	3.61

78	45.3	44.1	299.5	3.84	45.4	279.4	3.58
79	45.5	44.3	300.6	3.81	45.6	280.6	3.55
80	45.6	44.6	301.8	3.77	45.9	281.8	3.52
81	45.7	44.8	302.9	3.74	46.1	283.0	3.49
82	45.9	45.0	304.0	3.71	46.3	284.2	3.47
83	46.0	45.3	305.0	3.68	46.5	285.3	3.44
84	46.1	45.5	306.1	3.64	46.7	286.3	3.41
85	46.3	45.7	307.1	3.61	46.9	287.4	3.38
86	46.4	45.9	308.0	3.58	47.1	288.4	3.35
87	46.5	46.1	309.0	3.55	47.3	289.4	3.33
88	46.6	46.4	309.9	3.52	47.5	290.4	3.30
89	46.7	46.6	310.8	3.49	47.7	291.4	3.27
90	46.8	46.8	311.7	3.46	47.9	292.3	3.25
91	46.9	47.0	312.6	3.43	48.1	293.3	3.22
92	47.0	47.3	313.4	3.41	48.3	294.2	3.20
93	47.1	47.5	314.3	3.38	48.5	295.1	3.17
94	47.2	47.7	315.1	3.35	48.7	295.9	3.15
95	47	Xn Closure Supplied	61.0				

Species 3..... SS (19.0%) Measured Basal Area..... <Not
 Used>
 Species 4..... HW (5.0%) Measured Basal Area Age..... <No
 Used>
 Species 5..... CW (5.0%) Stocking Class..... 1
 Species 6..... BA (2.0%) PSYU Special Cruise #..... 195
 Method..... Air PSYU Subcode/TFL Block..... 0
 Forest Inventory Zone..... C Starting Total Age..... 10
 Utilization Level 1..... 17.5 Finishing Total Age..... 100
 Utilization Level 2..... 22.5 Age Increment..... 1
 Adjustment Factor..... 1.00
 Waste and Breakage File..... C:\VDYPVDYP_CFG\WBS.DAT

KINGCOME stratum 2

Stand Volume and Diameter Table, Air Method
 Poplar 58.0%, Alder 17.0%, Sitka Spruce 14.0%
 Western Hemlock 10.0%, Western Red Cedar 1.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 175+ VOLUME: 206.0 AGE: 33 MAI: 731

LIMIT: 225+ VOLUME: 194.6 AGE: 37 MAI: 633

CLOSE UTILIZATION LESS DECAY, WASTE 2 & BREAKAGE VOLUME

(17.5 cm+)				(22.5 cm+)											
AGE HT		DIA	VOL	MAI	DIA	VOL	MAI								
(yrs)(m)	(cm)	(m3/ha)	(m3/ha/yr)	(cm)	(m3/ha)	(m3/ha/yr)									
							42	56.8	362	243.5	5.80	38.6	214.9	5.12	
							43	57.2	36.6	247.6	5.76	38.9	219.3	5.10	
							44	57.6	37.0	251.6	5.72	39.3	223.6	5.08	
							45	57.9	37.4	255.3	5.67	39.7	227.7	5.06	
							46	58.2	37.8	259.0	5.63	40.0	231.7	5.04	
							47	58.6	38.2	262.5	5.58	40.4	235.6	5.01	
							48	58.9	38.6	265.8	5.54	40.7	239.3	4.99	
							49	59.2	39.0	269.1	5.49	41.1	242.9	4.96	
							50	59.5	39.4	272.2	5.44	41.4	246.5	4.93	
							51	59.7	39.8	275.2	5.40	41.8	249.9	4.90	
							52	60.0	40.2	278.1	5.35	42.1	253.2	4.87	
							53	60.3	40.6	280.9	5.30	42.5	256.5	4.84	
							54	60.5	41.0	283.6	5.25	42.8	259.6	4.81	
							55	60.7	41.3	286.2	5.20	43.2	262.7	4.78	
							56	61.0	41.7	288.8	5.16	43.5	265.7	4.74	
							57	61.2	42.1	291.2	5.11	43.8	268.6	4.71	
							58	61.4	42.5	293.6	5.06	44.2	271.4	4.68	
							59	61.6	42.8	295.8	5.01	44.5	274.2	4.65	
							60	61.8	43.2	298.0	4.97	44.8	276.9	4.61	
							61	62.0	43.5	299.8	4.91	45.1	278.7	4.57	
							62	62.2	43.9	301.5	4.86	45.4	280.5	4.52	
							63	62.4	44.2	303.1	4.81	45.7	282.2	4.48	
							64	62.5	44.5	304.6	4.76	46.0	283.8	4.43	
							65	62.7	44.8	306.2	4.71	46.2	285.4	4.39	
							66	62.9	45.1	307.6	4.66	46.5	287.0	4.35	
							67	63.0	45.4	309.1	4.61	46.8	288.5	4.31	
							68	63.2	45.7	310.4	4.57	47.1	289.9	4.26	
							69	63.3	46.0	311.8	4.52	47.3	291.3	4.22	
							70	63.5	46.3	313.0	4.47	47.6	292.7	4.18	
							71	63.6	46.6	314.3	4.43	47.9	294.0	4.14	
							72	63.7	46.9	315.5	4.38	48.1	295.3	4.10	
							73	63.9	47.2	316.7	4.34	48.4	296.5	4.06	
							74	64.0	47.5	317.8	4.29	48.7	297.7	4.02	
							75	64.1	47.8	318.9	4.25	48.9	298.9	3.99	
							76	64.2	48.1	319.9	4.21	49.2	300.1	3.95	
							77	64.4	48.4	321.0	4.17	49.4	301.2	3.91	

78	64.5	48.6	322.0	4.13	49.7	302.2	3.87
79	64.6	48.9	322.9	4.09	49.9	303.3	3.84
80	64.7	49.2	323.9	4.05	50.2	304.3	3.80
81	64.8	49.5	324.8	4.01	50.4	305.3	3.77
82	64.9	49.7	325.7	3.97	50.7	306.2	3.73
83	65.0	50.0	326.5	3.93	50.9	307.2	3.70
84	65.1	50.3	327.3	3.90	51.2	308.1	3.67
85	65.2	50.5	328.1	3.86	51.4	308.9	3.63
86	65.3	50.8	328.9	3.82	51.6	309.8	3.60
87	65.4	51.0	329.7	3.79	51.9	310.6	3.57
88	65.5	51.3	330.4	3.75	52.1	311.4	3.54
89	65.5	51.5	331.2	3.72	52.3	312.2	3.51
90	65.6	51.7	331.9	3.69	52.6	313.0	3.48
91	65.7	52.0	332.5	3.65	52.8	313.7	3.45
92	65.8	52.2	333.2	3.62	53.1	314.4	3.42
93	65.9	52.5	333.8	3.59	53.3	315.2	3.39
94	65.9	52.7	334.5	3.56	53.5	315.8	3.36
95	66.0	53.0	335.1	3.53	53.8	316.5	3.33
96	66.1	53.2	335.7	3.50	54.0	317.2	3.30
97	66.2	53.4	336.2	3.47	54.3	317.8	3.28
98	66.2	53.7	336.8	3.44	54.5	318.4	3.25
99	66.3	53.9	337.3	3.41	54.8	319.0	3.22
100	66.4	54.2	337.9	3.38	55.0	319.6	3.20

NOTE: Culmination Age and MAI determined from Net Decay Volumes only.

NOTE: Species 'AC' Vol/Dia computed using Species Default SI of 45.00

NOTE: Species 'DR' Vol/Dia computed using Species Default SI of 35.00

NOTE: Species 'SS' Vol/Dia computed using Species Default SI of 40.00

NOTE: Species 'HW' Vol/Dia computed using Species Default SI of 35.00

NOTE: Species 'CW' Vol/Dia computed using Species Default SI of 30.00

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 SI (BHA 50)
 Calc/Supplied 60.0
 Core Version Number... 6.4a Stand Height (m)..... <No Used>
 Species 1..... AC (58.0%) Stand Total Age..... <Not Used>
 Species 2..... DR (17.0%) % Crown Closure Supplied 61.0
 Species 3..... SS (14.0%) Measured Basal Area..... <Not Used>
 Species 4..... HW (10.0%) Measured Basal Area Age. <Not Used>
 Species 5..... CW (1.0%) Stocking Class..... 1
 Method..... Air PSYU Special Cruise #.... 195
 Forest Inventory Zone... C PSYU Subcode/TFL Block... 0
 Utilization Level 1.... 17.5 Starting Total Age..... 10
 Utilization Level 2.... 22.5 Finishing Total Age..... 100
 Adjustment Factor..... 1.00 Age Increment..... 1
 Waste and Breakage File.
 C:\VDYP\VDYP_CFG\WBS.DAT

KINGCOME stratum 3

Stand Volume and Diameter Table, Air Method
Poplar 77.0%, Alder 22.0%, Western Red Cedar 1.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 17.5+ VOLUME: 175.6 AGE: 37 MAI: 6.06

LIMIT: 22.5+ VOLUME: 168.9 AGE: 42 MAI: 5.33

CLOSE UTILIZATION LESS DECAY, WASTE 2 & BREAKAGE VOLUME

(17.5 cm+)				(22.5 cm+)											
AGE HT		DIA	VOL	MAI	DIA	VOL	MAI								
(yrs)	(m)	(cm)	(m3/ha)	(m3/ha/yr)	(cm)	(m3/ha)	(m3/ha/yr)								
								43	36.9	35.3	195.4	4.54	38.0	173.0	4.02
								44	37.3	35.7	199.0	4.52	38.4	176.9	4.02
								45	37.7	36.2	202.5	4.50	38.7	180.7	4.02
								46	38.1	36.6	205.9	4.48	39.1	184.4	4.01
								47	38.4	37.0	209.1	4.45	39.5	188.0	4.00
								48	38.7	37.5	212.2	4.42	39.9	191.5	3.99
								49	39.1	37.9	215.2	4.39	40.3	194.9	3.98
								50	39.4	38.3	218.1	4.36	40.6	198.3	3.97
								51	39.7	38.8	220.8	4.33	41.0	201.5	3.95
								52	40.0	39.2	223.5	4.30	41.4	204.6	3.94
								53	40.3	39.6	226.1	4.27	41.8	207.7	3.92
								54	40.6	40.0	228.6	4.23	42.1	210.7	3.90
								55	40.8	40.4	231.0	4.20	42.5	213.6	3.88
								56	41.1	40.9	233.3	4.17	42.9	216.4	3.86
								57	41.4	41.3	235.6	4.13	43.2	219.2	3.85
								58	41.6	41.7	237.8	4.10	43.6	221.9	3.83
								59	41.8	42.1	239.9	4.07	44.0	224.6	3.81
								60	42.1	42.5	241.9	4.03	44.3	227.2	3.79
								61	42.3	42.9	243.4	3.99	44.6	228.8	3.75
								62	42.5	43.2	244.9	3.95	44.9	230.3	3.71
								63	42.7	43.5	246.3	3.91	45.2	231.8	3.68
								64	42.9	43.9	247.7	3.87	45.5	233.2	3.64
								65	43.1	44.2	249.0	3.83	45.8	234.6	3.61
								66	43.3	44.6	250.3	3.79	46.1	235.9	3.57
								67	43.5	44.9	251.5	3.75	46.4	237.2	3.54
								68	43.7	45.2	252.7	3.72	46.7	238.5	3.51
								69	43.9	45.6	253.9	3.68	47.0	239.7	3.47
								70	44.1	45.9	255.0	3.64	47.3	240.9	3.44
								71	44.2	46.2	256.1	3.61	47.6	242.1	3.41
								72	44.4	46.5	257.1	3.57	47.9	243.2	3.38
								73	44.6	46.9	258.1	3.54	48.2	244.2	3.35
								74	44.7	47.2	259.1	3.50	48.5	245.3	3.31
								75	44.9	47.5	260.1	3.47	48.7	246.3	3.28
								76	45.0	47.8	261.0	3.43	49.0	247.3	3.25
								77	45.2	48.1	261.9	3.40	49.3	248.3	3.22
								78	45.3	48.4	262.8	3.37	49.6	249.2	3.19
								79	45.5	48.8	263.6	3.34	49.9	250.1	3.17

80	45.6	49.1	264.4	3.31	50.1	251.0	3.14
81	45.7	49.4	265.2	3.27	50.4	251.8	3.11
82	45.9	49.7	266.0	3.24	50.7	252.6	3.08
83	46.0	50.0	266.7	3.21	50.9	253.4	3.05
84	46.1	50.3	267.5	3.18	51.2	254.2	3.03
85	46.3	50.6	268.2	3.15	51.5	255.0	3.00
86	46.4	50.9	268.8	3.13	51.7	255.7	2.97
87	46.5	51.2	269.5	3.10	52.0	256.4	2.95
88	46.6	51.4	270.1	3.07	52.3	257.1	2.92
89	46.7	51.7	270.8	3.04	52.5	257.8	2.90
90	46.8	52.0	271.4	3.02	52.8	258.5	2.87
91	46.9	52.3	272.0	2.99	53.1	259.1	2.85
92	47.0	52.6	272.5	2.96	53.3	259.7	2.82
93	47.1	52.9	273.1	2.94	53.6	260.4	2.80
94	47.2	53.2	273.6	2.91	53.9	260.9	2.78
95	47.3	53.5	274.2	2.89	54.1	261.5	2.75
96	47.4	53.8	274.7	2.86	54.4	262.1	2.73
97	47.5	54.1	275.2	2.84	54.7	262.6	2.71
98	47.6	54.4	275.6	2.81	54.9	263.2	2.69
99	47.7	54.6	276.1	2.79	55.2	263.7	2.66
100	47.8	54.9	276.6	2.77	55.5	264.2	2.64

NOTE: Culmination Age and MAI determined from Net Decay Volumes only.

NOTE: Species 'DR' Vol/Dia computed using Species Default SI of 35.00

NOTE: Species 'CW' Vol/Dia computed using Species Default SI of 30.00

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Height (m).....
<Not Used>

Core Version Number..... 6.4a Stand Total Age..... <Not
Used>

Species 1..... AC (77.0%) % Crown Closure Supplied
61.0

Species 2..... DR (22.0%) Measured Basal Area..... <Not
Used>

Species 3..... CW (1.0%) Measured Basal Area Age..
<Not Used>

Method..... Air Stocking Class..... 1

Forest Inventory Zone... C PSYU Special Cruise #... 195

Utilization Level 1..... 17.5 PSYU Subcode/TFL Block... 0

Utilization Level 2..... 22.5 Starting Total Age..... 10

Adjustment Factor..... 1.00 Finishing Total Age..... 100

SI (BHA 50) Calc/Supplied 40.0 Age Increment..... 1

Waste and Breakage File..

C:\VDYP\VDYP_CFG\WBS.DAT

KINGCOME stratum 4

Stand Volume and Diameter Table, Air Method
Alder 73.0%, Poplar 15.0%, Sitka Spruce 8.0%
Western Hemlock 3.0%, Western Red Cedar 1.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 17.5+ VOLUME: 214.7 AGE: 25 MAI: 9.03

LIMIT: 22.5+ VOLUME: 212.2 AGE: 32 MAI: 7.08

CLOSE UTILIZATION LESS DECAY, WASTE 2 & BREAKAGE VOLUME

(17.5 cm+)				(22.5 cm+)							
AGE	HT	DIA	VOL	MAI	DIA	VOL	MAI				
(yrs)	(m)	(cm)	(m3/ha)	(m3/ha/yr)	(cm)	(m3/ha)	(m3/ha/yr)				
10	15.8	22.7	28.3	2.83	27.1	11.2	1.12	40	32.4	33.8	293.5
11	17.0	23.0	43.0	3.91	27.5	19.9	1.81	41	32.6	34.1	296.6
12	18.1	23.4	59.9	4.99	27.9	28.5	2.38	42	32.7	34.4	300.2
13	19.1	23.9	75.6	5.81	27.8	38.9	2.99	43	32.9	34.8	303.5
14	20.1	24.3	90.4	6.46	28.1	51.5	3.68	44	33.1	35.1	306.7
15	21.0	24.8	104.5	6.97	28.5	63.5	4.23	45	33.2	35.4	309.8
16	21.8	25.2	117.7	7.36	28.9	74.9	4.68	46	33.4	35.7	312.7
17	22.6	25.6	130.2	7.66	29.2	85.9	5.05	47	33.5	36.0	315.5
18	23.4	25.9	143.1	7.95	29.5	96.4	5.35	48	33.6	36.3	318.1
19	24.1	26.3	155.2	8.17	29.9	106.4	5.60	49	33.8	36.6	320.7
20	24.8	26.7	166.5	8.33	30.2	116.0	5.80	50	33.9	36.9	322.6
21	25.4	27.1	177.5	8.45	30.4	125.8	5.99	51	34.0	37.2	324.2
22	26.0	27.5	187.8	8.54	30.8	135.4	6.16	52	34.1	37.5	325.8
23	26.6	27.9	197.4	8.58	31.1	144.6	6.29	53	34.2	37.8	327.2
24	27.1	28.2	206.3	8.60	31.4	153.3	6.39	54	34.3	38.1	328.6
25	27.6	28.6	214.7	8.59	31.7	161.8	6.47	55	34.3	38.3	329.9
26	28.1	29.0	222.5	8.56	32.0	170.1	6.54	56	34.4	38.6	331.1
27	28.5	29.4	229.9	8.51	32.3	177.9	6.59	57	34.5	38.9	332.2
28	28.9	29.8	236.8	8.46	32.6	185.4	6.62	58	34.6	39.2	333.2
29	29.3	30.1	243.3	8.39	32.9	192.5	6.64	59	34.6	39.5	334.2
30	29.7	30.5	249.4	8.31	33.2	199.4	6.65	60	34.7	39.8	335.1
31	30.0	30.8	255.1	8.23	33.5	205.9	6.64	61	34.8	39.8	336.3
32	30.3	31.2	260.5	8.14	33.8	212.2	6.63	62	34.8	39.9	337.5
33	30.7	31.5	265.6	8.05	34.1	218.2	6.61	63	34.9	40.0	338.7
34	30.9	31.9	270.3	7.95	34.4	224.0	6.59	64	34.9	40.1	339.9
35	31.2	32.2	274.8	7.85	34.6	229.6	6.56	65	35.0	40.2	341.0
36	31.5	32.5	279.0	7.75	34.9	235.0	6.53	66	35.0	40.2	342.1
37	31.7	32.8	283.0	7.65	35.2	240.1	6.49	67	35.0	40.3	343.2
38	32.0	33.2	286.7	7.55	35.5	245.1	6.45	68	35.1	40.4	344.3
39	32.2	33.5	290.2	7.44	35.8	249.9	6.41	69	35.1	40.5	345.3
								70	35.2	40.5	346.4
								71	35.2	40.6	347.4
								72	35.2	40.7	348.4
								73	35.2	40.8	349.4

74	35.3	40.8	350.4	4.74	42.2	346.1	4.68
75	35.3	40.9	351.4	4.68	42.2	347.1	4.63
76	35.3	41.0	352.3	4.64	42.3	348.1	4.58
77	35.3	41.0	353.2	4.59	42.4	349.1	4.53
78	35.4	41.1	354.2	4.54	42.4	350.1	4.49
79	35.4	41.2	355.1	4.49	42.5	351.0	4.44
80	35.4	41.2	356.0	4.45	42.6	351.9	4.40
81	35.4	41.3	356.8	4.41	42.6	352.8	4.36
82	35.4	41.4	357.7	4.36	42.7	353.7	4.31
83	35.5	41.4	358.6	4.32	42.8	354.6	4.27
84	35.5	41.5	359.4	4.28	42.8	355.5	4.23
85	35.5	41.6	360.2	4.24	42.9	356.4	4.19
86	35.5	41.6	361.0	4.20	42.9	357.2	4.15
87	35.5	41.7	361.9	4.16	43.0	358.0	4.12
88	35.5	41.8	362.7	4.12	43.1	358.9	4.08
89	35.5	41.8	363.4	4.08	43.1	359.7	4.04
90	35.6	41.9	364.2	4.05	43.2	360.5	4.01
91	35.6	41.9	365.0	4.01	43.3	361.3	3.97
92	35.6	42.0	365.8	3.98	43.3	362.1	3.94
93	35.6	42.1	366.5	3.94	43.4	362.9	3.90
94	35.6	42.1	367.2	3.91	43.4	363.6	3.87
95	35.6	42.2	368.0	3.87	43.5	364.4	3.84
96	35.6	42.3	368.7	3.84	43.6	365.1	3.80
97	35.6	42.3	369.4	3.81	43.6	365.9	3.77
98	35.6	42.4	370.1	3.78	43.7	366.6	3.74
99	35.6	42.5	370.8	3.75	43.8	367.3	3.71
100	35.6	42.5	371.5	3.72	43.8	368.0	3.68

NOTE: Culmination Age and MAI determined from Net Decay Volumes only.
NOTE: Species CW Vol/Dia computed using Species Default SI of 30.00

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 SI (BHA 50)
Calc/Supplied 34.0
Core Version Number... 6.4a Stand Height (m)..... <No Used>
Species 1..... DR (73.0%) Stand Total Age..... <Not Used>
Species 2..... AC (15.0%) % Crown Closure Supplied 61.0
Species 3..... SS (8.0%) Measured Basal Area..... <Not Used>
Species 4..... HW (3.0%) Measured Basal Area Age..... <Not Used>
Species 5..... CW (1.0%) Stocking Class..... 1
Method..... Air PSYU Special Cruise #... 195
Forest Inventory Zone... C PSYU Subcode/TFL Block... 0
Utilization Level 1... 17.5 Starting Total Age... 10
Utilization Level 2... 22.5 Finishing Total Age... 100
Adjustment Factor... 1.00 Age Increment... 1
Waste and Breakage File...
C:\VDYP\VDYP_CFG\WBS.DAT

KINGCOME stratum 5

Stand Volume and Diameter Table, Air Method
Alder 70.0%, Sitka Spruce 14.0%, Western Hemlock 13.0%
Poplar 3.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 17.5+ VOLUME: 2663 AGE: 47 MAI: 5.96

LIMIT: 22.5+ VOLUME: 3014 AGE: 60 MAI: 5.29

CLOSE UTILIZATION LESS DECAY, WASTE 2 & BREAKAGE VOLUME

		(17.5 cm+)			(22.5 cm+)								
AGE HT		DIA	VOL	MAI	DIA	VOL	MAI						
(yrs)	(m)	(cm)	(m3/ha)	(m3/ha/yr)	(cm)	(m3/ha)	(m3/ha/yr)						
10	9.2	0.0	0.0	0.00	0.0	0.0	0.00	42	23.4	29.5	236.5	5.63	322
11	10.0	0.0	0.0	0.00	0.0	0.0	0.00	43	23.6	29.8	242.7	5.65	32.5
12	10.7	0.0	0.0	0.00	0.0	0.0	0.00	44	23.8	30.1	248.9	5.66	32.7
13	11.4	19.4	0.1	0.01	0.0	0.0	0.00	45	24.0	30.3	254.9	5.66	32.9
14	12.1	19.8	0.8	0.06	0.0	0.0	0.00	46	24.2	30.6	260.7	5.67	33.2
15	12.7	21.9	6.1	0.41	0.0	0.0	0.00	47	24.4	30.9	266.3	5.67	33.4
16	13.4	22.2	15.1	0.94	26.8	0.9	0.05	48	24.6	31.1	271.9	5.66	33.6
17	14.0	22.5	23.6	1.39	26.5	7.0	0.41	49	24.8	31.4	277.3	5.66	33.9
18	14.5	22.8	32.0	1.78	26.8	13.3	0.74	50	25.0	31.6	282.5	5.65	34.1
19	15.1	23.1	40.9	2.15	27.0	19.9	1.05	51	25.1	31.9	287.7	5.64	34.3
20	15.6	23.4	49.8	2.49	27.3	26.7	1.33	52	25.3	32.2	292.7	5.63	34.5
21	16.1	23.7	58.6	2.79	27.5	33.6	1.60	53	25.4	32.4	297.6	5.61	34.8
22	16.6	24.1	67.3	3.06	27.7	40.4	1.84	54	25.6	32.7	302.4	5.60	35.0
23	17.1	24.3	76.0	3.30	28.0	47.3	2.06	55	25.7	32.9	307.0	5.58	35.2
24	17.6	24.3	85.8	3.58	28.2	54.2	2.26	56	25.9	33.2	311.6	5.56	35.4
25	18.0	24.6	97.5	3.90	28.5	61.0	2.44	57	26.0	33.4	316.1	5.54	35.7
26	18.4	24.9	108.4	4.17	28.7	67.7	2.60	58	26.1	33.7	320.4	5.52	35.9
27	18.8	25.2	118.8	4.40	28.9	74.4	2.76	59	26.3	33.9	324.7	5.50	36.1
28	19.2	25.5	128.7	4.60	29.1	81.3	2.90	60	26.4	34.2	328.8	5.48	36.3
29	19.6	25.7	138.2	4.77	29.1	89.3	3.08	61	26.5	34.3	331.4	5.43	36.4
30	19.9	26.0	147.3	4.91	29.4	98.4	3.28	62	26.6	34.4	333.9	5.39	36.5
31	20.3	26.3	156.1	5.04	29.6	107.2	3.46	63	26.7	34.4	336.4	5.34	36.6
32	20.6	26.6	164.7	5.15	29.9	115.7	3.61	64	26.8	34.5	338.9	5.29	36.6
33	21.0	26.9	172.9	5.24	30.1	124.0	3.76	65	26.9	34.6	341.3	5.25	36.7
34	21.3	27.2	180.8	5.32	30.3	132.0	3.88	66	27.0	34.7	343.6	5.21	36.8
35	21.6	27.5	188.5	5.39	30.6	139.9	4.00	67	27.1	34.7	346.0	5.16	36.9
36	21.9	27.8	196.0	5.44	30.8	147.6	4.10	68	27.2	34.8	348.3	5.12	36.9
37	22.1	28.1	203.2	5.49	31.1	155.2	4.19	69	27.3	34.9	350.6	5.08	37.0
38	22.4	28.4	210.2	5.53	31.3	162.5	4.28	70	27.4	35.0	352.8	5.04	37.1
39	22.7	28.7	217.0	5.56	31.5	169.8	4.35	71	27.4	35.0	355.0	5.00	37.2
40	22.9	28.9	223.6	5.59	31.8	176.8	4.42	72	27.5	35.1	357.2	4.96	37.2
41	23.2	29.2	230.0	5.61	32.0	183.8	4.48	73	27.6	35.2	359.4	4.92	37.3
								74	27.7	35.3	361.5	4.89	37.4
								75	27.7	35.3	363.6	4.85	37.5
								76	27.8	35.4	365.7	4.81	37.5
								77	27.9	35.5	367.7	4.78	37.6

78	27.9	35.6	369.7	4.74	37.7	342.1	4.39
79	28.0	35.6	371.7	4.71	37.8	344.1	4.36
80	28.0	35.7	373.7	4.67	37.8	346.0	4.33
81	28.1	35.8	375.6	4.64	37.9	348.0	4.30
82	28.1	35.9	377.5	4.60	38.0	349.8	4.27
83	28.2	35.9	379.4	4.57	38.0	351.7	4.24
84	28.2	36.0	381.3	4.54	38.1	353.5	4.21
85	28.3	36.1	383.1	4.51	38.2	355.3	4.18
86	28.3	36.1	385.0	4.48	38.3	357.1	4.15
87	28.4	36.2	386.7	4.45	38.3	358.9	4.13
88	28.4	36.3	388.5	4.41	38.4	360.6	4.10
89	28.5	36.3	390.3	4.39	38.5	362.4	4.07
90	28.5	36.4	392.0	4.36	38.5	364.1	4.05
91	28.5	36.5	393.7	4.33	38.6	365.7	4.02
92	28.6	36.6	395.4	4.30	38.7	367.4	3.99
93	28.6	36.6	397.0	4.27	38.8	369.0	3.97
94	28.7	36.7	398.7	4.24	38.8	370.6	3.94
95	28.7	36.8	400.3	4.21	38.9	372.2	3.92
96	28.7	36.8	401.9	4.19	39.0	373.8	3.89
97	28.8	36.9	403.5	4.16	39.0	375.3	3.87
98	28.8	37.0	405.1	4.13	39.1	376.9	3.85
99	28.8	37.0	406.6	4.11	39.2	378.4	3.82
100	28.8	37.1	408.1	4.08	39.2	379.9	3.80

NOTE: Culmination Age and MAI determined from Net Decay Volumes only.

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Height (m).....
 <Not Used>
 Core Version Number... 6.4a Stand Total Age..... <Not
 Used>
 Species 1..... DR (70.0%) % Crown Closure Supplied
 61.0
 Species 2..... SS (14.0%) Measured Basal Area..... <Not
 Used>
 Species 3..... HW (13.0%) Measured Basal Area Age..
 <Not Used>
 Species 4..... AC (3.0%) Stocking Class..... 1
 Method..... Air PSYU Special Cruise #... 195
 Forest Inventory Zone... C PSYU Subcode/TFL Block..
 0
 Utilization Level 1... 17.5 Starting Total Age... 10
 Utilization Level 2... 22.5 Finishing Total Age... 100
 Adjustment Factor... 1.00 Age Increment..... 1
 SI (BHA 50) Calc/Supplied 25.0
 Waste and Breakage File..
 C:\VDYP\VDYP_CFG\WBS.DAT

KINGCOME stratum 6

Stand Volume and Diameter Table, Air Method
Western Hemlock 38.0%, Poplar 24.0%, Sitka Spruce 17.0%
Alder 9.0%, Western Red Cedar 9.0%, Amabilis Fir 3.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 175+ VOLUME: 341.7 AGE: 60 MAI: 625

LIMIT: 225+ VOLUME: 336.0 AGE: 66 MAI: 5.59

CLOSE UTILIZATION LESS DECAY, WASTE 2 & BREAKAGE VOLUME

(175 cm ⁺)				(225 cm ⁺)			
AGE	HT	DIA	VOL	MAI	DIA	VOL	MAI
(yrs)	(m)	(cm)	(m ³ /ha)	(m ³ /ha/yr)	(cm)	(m ³ /ha)	(m ³ /ha/yr)
10	3.4	20.0	0.3	0.03	0.0	0.0	0.00
11	4.0	20.5	0.6	0.06	0.0	0.0	0.00
12	4.5	20.9	0.9	0.08	24.3	0.1	0.01
13	5.1	21.3	1.2	0.09	24.6	0.4	0.03
14	5.6	21.8	1.5	0.11	24.8	0.7	0.05
15	6.2	22.2	1.8	0.12	25.1	1.0	0.07
16	6.8	22.7	2.2	0.14	25.4	1.4	0.09
17	7.5	23.2	3.1	0.18	25.8	2.1	0.12
18	8.2	23.7	4.4	0.24	26.1	3.1	0.17
19	8.9	24.2	5.8	0.30	26.4	4.3	0.23
20	9.5	22.8	8.7	0.43	26.7	5.5	0.28
21	10.2	23.2	11.7	0.56	27.1	6.8	0.32
22	10.8	22.7	19.2	0.87	26.9	8.6	0.39
23	11.5	23.0	28.6	1.24	27.2	10.3	0.45
24	12.1	23.4	37.7	1.57	27.0	13.2	0.55
25	12.7	23.7	47.4	1.90	27.2	17.4	0.69
26	13.4	24.0	56.8	2.19	27.6	24.6	0.95
27	14.0	24.4	66.1	2.45	27.9	33.7	1.25
28	14.6	24.7	75.2	2.69	28.1	42.6	1.52
29	15.2	24.4	84.2	2.90	28.4	51.3	1.77
30	15.8	24.7	98.1	3.27	28.7	60.0	2.00
31	16.3	25.1	110.9	3.58	29.0	68.5	2.21
32	16.9	25.4	122.8	3.84	29.3	76.8	2.40
33	17.5	25.7	134.1	4.06	29.6	85.0	2.58
34	18.0	26.0	144.8	4.26	29.4	96.1	2.83
35	18.6	26.3	155.1	4.43	29.7	107.2	3.06
36	19.1	26.6	165.0	4.58	29.9	117.9	3.27
37	19.6	26.9	174.6	4.72	30.2	128.1	3.46
38	20.2	27.2	183.8	4.84	30.5	137.9	3.63
39	20.7	27.5	192.7	4.94	30.7	147.4	3.78
40	21.2	27.8	201.3	5.03	31.0	156.6	3.92
41	21.7	28.1	209.7	5.11	31.3	165.5	4.04

42	22.1	284	2182	5.19	31.6	1744	4.15
43	22.6	287	2264	5.27	31.8	1830	4.26
44	23.1	290	2345	5.33	32.1	1915	4.35
45	23.6	292	2424	5.39	32.3	199.7	4.44
46	24.0	295	250.1	5.44	32.6	207.8	4.52
47	24.5	298	257.6	5.48	32.9	215.7	4.59
48	24.9	30.1	265.0	5.52	33.1	223.4	4.65
49	25.3	30.4	272.1	5.55	33.4	231.0	4.71
50	25.8	30.6	279.2	5.58	33.6	238.4	4.77
51	26.2	30.9	286.0	5.61	33.9	245.6	4.82
52	26.6	31.2	292.8	5.63	34.2	252.7	4.86
53	27.0	31.4	299.3	5.65	34.4	259.7	4.90
54	27.4	31.7	305.8	5.66	34.7	266.5	4.93
55	27.8	32.0	312.1	5.67	34.9	273.2	4.97
56	28.2	32.2	318.3	5.68	35.2	279.7	5.00
57	28.6	32.5	324.3	5.69	35.4	286.2	5.02
58	29.0	32.8	330.2	5.69	35.7	292.5	5.04
59	29.3	33.0	336.0	5.69	35.9	298.7	5.06
60	29.7	33.3	341.7	5.69	36.1	304.8	5.08
61	30.1	33.5	346.9	5.69	36.4	310.2	5.09
62	30.4	33.7	352.1	5.68	36.6	315.6	5.09
63	30.8	34.0	357.2	5.67	36.8	320.8	5.09
64	31.1	34.2	362.1	5.66	37.0	326.0	5.09
65	31.5	34.4	367.0	5.65	37.2	331.1	5.09
66	31.8	34.6	371.8	5.63	37.5	336.0	5.09
67	32.2	34.9	376.4	5.62	37.7	340.9	5.09
68	32.5	35.1	381.0	5.60	37.9	345.6	5.08
69	32.8	35.3	385.5	5.59	38.1	350.3	5.08
70	33.1	35.5	389.9	5.57	38.3	354.9	5.07
71	33.4	35.7	394.3	5.55	38.5	359.4	5.06
72	33.8	36.0	398.5	5.53	38.7	363.8	5.05
73	34.1	36.2	402.7	5.52	38.9	368.2	5.04
74	34.4	36.4	406.8	5.50	39.1	372.4	5.03
75	34.7	36.6	410.8	5.48	39.4	376.6	5.02
76	35.0	36.8	414.7	5.46	39.6	380.7	5.01
77	35.3	37.0	418.6	5.44	39.8	384.7	5.00

78	35.5	37.2	422.4	5.42	40.0	388.7	4.98
79	35.8	37.4	426.2	5.39	40.2	392.6	4.97
80	36.1	37.6	429.8	5.37	40.4	396.4	4.96
81	36.4	37.8	433.4	5.35	40.6	400.2	4.94
82	36.7	38.0	436.9	5.33	40.8	403.9	4.93
83	36.9	38.2	440.4	5.31	41.0	407.5	4.91
84	37.2	38.4	443.8	5.28	41.2	411.0	4.89
85	37.5	38.6	447.2	5.26	41.4	414.5	4.88
86	37.7	38.8	450.4	5.24	41.6	417.9	4.86
87	38.0	39.0	453.7	5.21	41.7	421.3	4.84
88	38.2	39.2	456.8	5.19	41.9	424.6	4.83
89	38.5	39.4	459.9	5.17	42.1	427.9	4.81
90	38.7	39.6	463.0	5.14	42.3	431.1	4.79
91	39.0	39.8	466.0	5.12	42.5	434.2	4.77
92	39.2	40.0	469.0	5.10	42.7	437.3	4.75
93	39.4	40.2	471.9	5.07	42.9	440.4	4.74
94	39.7	40.4	474.7	5.05	43.1	443.4	4.72
95	39.9	40.6	477.6	5.03	43.3	446.3	4.70
96	40.1	40.7	480.3	5.00	43.5	449.2	4.68
97	40.4	40.9	483.0	4.98	43.6	452.1	4.66
98	40.6	41.1	485.7	4.96	43.8	454.9	4.64
99	40.8	41.3	488.4	4.93	44.0	457.7	4.62
100	41.0	41.5	490.9	4.91	44.2	460.4	4.60
101	41.3	41.7	493.5	4.89	44.4	463.1	4.58
102	41.5	41.9	496.0	4.86	44.6	465.7	4.57
103	41.7	42.0	498.5	4.84	44.7	468.3	4.55
104	41.9	42.2	500.9	4.82	44.9	470.8	4.53
105	42.1	42.4	503.3	4.79	45.1	473.4	4.51
106	42.3	42.6	505.6	4.77	45.3	475.8	4.49
107	42.5	42.8	507.9	4.75	45.5	478.3	4.47
108	42.7	42.9	510.2	4.72	45.6	480.7	4.45
109	42.9	43.1	512.5	4.70	45.8	483.1	4.43
110	43.1	43.3	514.7	4.68	46.0	485.4	4.41
111	43.3	43.5	516.8	4.66	46.2	487.6	4.39
112	43.5	43.6	518.8	4.63	46.3	489.8	4.37
113	43.7	43.8	520.9	4.61	46.5	492.0	4.35
114	43.9	44.0	522.9	4.59	46.7	494.1	4.33
115	44.1	44.2	524.9	4.56	46.9	496.2	4.31
116	44.2	44.3	526.8	4.54	47.0	498.3	4.30
117	44.4	44.5	528.7	4.52	47.2	500.3	4.28
118	44.6	44.7	530.6	4.50	47.4	502.3	4.26
119	44.8	44.9	532.4	4.47	47.6	504.2	4.24
120	45.0	45.0	534.2	4.45	47.7	506.2	4.22

NOTE: Culmination Age and MAI determined from Net

Decay Volumes only.

NOTE: Species 'HW' Vol/Dia computed using Species

Default CC of 61.0%

NOTE: Species 'AC' Vol/Dia computed using Species Default

CC of 61.0%

NOTE: Species 'SS' Vol/Dia computed using Species Default

CC of 50.0%

NOTE: Species 'DR' Vol/Dia computed using Species Default

CC of 72.0%

NOTE: Species 'CW' Vol/Dia computed using Species

Default CC of 60.0%

NOTE: Species 'BA' Vol/Dia computed using Species Default

CC of 57.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 SI (BHA 50)

Calc/Supplied 28.0

Core Version Number..... 6.4a Stand Height (m).....

<Not Used>

Species 1..... HW (38.0%) Stand Total Age..... <Not
Used>

Species 2..... AC (24.0%) % Crown Closure Supplied
0.0

Species 3..... SS (17.0%) Measured Basal Area.....
<Not Used>

Species 4..... DR (9.0%) Measured Basal Area Age..
<Not Used>

Species 5..... CW (9.0%) Stocking Class..... 1

Species 6..... BA (3.0%) PSYU Special Cruise #.... 19

Method..... Air PSYU Subcode/TFL Block... 0

Forest Inventory Zone.... C Starting Total Age..... 10

Utilization Level 1..... 17.5 Finishing Total Age..... 120

Utilization Level 2..... 22.5 Age Increment..... 1

Adjustment Factor..... 1.00

Waste and Breakage File..

C:\VDYP\VDYP_CFG\WBS.DAT

APPENDIX IV
VDYP YIELD TABLES FOR COTTONWOOD STANDS

- A) NATURAL**
- B) MANAGED**

A) NATURAL STANDS - SITE INDEX 15

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 249.6 AGE: 108 MAI: 2.31
LIMIT: 17.5+ VOLUME: 260.5 AGE: 117 MAI: 2.23

AGE	C.U. LESS DECAY VOLUME (12.5 cm+)				C.U. LESS DECAY VOLUME (17.5 cm+)			
	TOT (m)	HT (cm)	DIA (m**3/ha)	VOL (m**3/ha/yr)	MAI	DIA (cm)	VOL (m**3/ha)	MAI (m**3/ha/yr)
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00	
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00	
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00	
3	1.4	0.0	0.0	0.00	0.0	0.0	0.00	
4	1.6	0.0	0.0	0.00	0.0	0.0	0.00	
5	1.7	0.0	0.0	0.00	0.0	0.0	0.00	
6	2.0	0.0	0.0	0.00	0.0	0.0	0.00	
7	2.2	0.0	0.0	0.00	0.0	0.0	0.00	
8	2.4	0.0	0.0	0.00	0.0	0.0	0.00	
9	2.7	0.0	0.0	0.00	0.0	0.0	0.00	
10	2.9	0.0	0.0	0.00	0.0	0.0	0.00	
11	3.2	0.0	0.0	0.00	0.0	0.0	0.00	
12	3.5	0.0	0.0	0.00	0.0	0.0	0.00	
13	3.7	0.0	0.0	0.00	0.0	0.0	0.00	
14	4.0	0.0	0.0	0.00	0.0	0.0	0.00	
15	4.3	0.0	0.0	0.00	0.0	0.0	0.00	
16	4.6	0.0	0.0	0.00	0.0	0.0	0.00	
17	4.9	0.0	0.0	0.00	0.0	0.0	0.00	
18	5.2	0.0	0.0	0.00	0.0	0.0	0.00	
19	5.5	0.0	0.0	0.00	0.0	0.0	0.00	
20	5.8	0.0	0.0	0.00	0.0	0.0	0.00	
21	6.1	0.0	0.0	0.00	0.0	0.0	0.00	
22	6.4	0.0	0.0	0.00	0.0	0.0	0.00	
23	6.7	0.0	0.0	0.00	0.0	0.0	0.00	
24	7.0	0.0	0.0	0.00	0.0	0.0	0.00	
25	7.3	0.0	0.0	0.00	0.0	0.0	0.00	
26	7.6	0.0	0.0	0.00	0.0	0.0	0.00	
27	8.0	0.0	0.0	0.00	0.0	0.0	0.00	
28	8.3	0.0	0.0	0.00	0.0	0.0	0.00	
29	8.6	0.0	0.0	0.00	0.0	0.0	0.00	
30	8.9	0.0	0.0	0.00	0.0	0.0	0.00	
31	9.2	0.0	0.0	0.00	0.0	0.0	0.00	
32	9.5	0.0	0.0	0.00	0.0	0.0	0.00	
33	9.8	0.0	0.0	0.00	0.0	0.0	0.00	
34	10.1	0.0	0.0	0.00	0.0	0.0	0.00	
35	10.3	0.0	0.0	0.00	0.0	0.0	0.00	
36	10.6	0.0	0.0	0.00	0.0	0.0	0.00	
37	10.9	0.0	0.0	0.00	0.0	0.0	0.00	
38	11.2	0.0	0.0	0.00	0.0	0.0	0.00	
39	11.5	0.0	0.0	0.00	0.0	0.0	0.00	
40	11.8	0.0	0.0	0.00	0.0	0.0	0.00	
41	12.1	0.0	0.0	0.00	0.0	0.0	0.00	
42	12.3	0.0	0.0	0.00	0.0	0.0	0.00	
43	12.6	0.0	0.0	0.00	0.0	0.0	0.00	
44	12.9	17.3	4.2	0.09	0.0	0.0	0.00	

45	13.2	17.5	10.0	0.22	0.0	0.0	0.00
46	13.4	17.7	15.8	0.34	0.0	0.0	0.00
47	13.7	17.9	21.4	0.46	0.0	0.0	0.00
48	14.0	18.1	27.0	0.56	0.0	0.0	0.00
49	14.2	18.3	32.5	0.66	22.1	4.1	0.08
50	14.5	18.5	38.0	0.76	22.2	10.0	0.20
51	14.7	18.7	43.4	0.85	22.4	15.8	0.31
52	15.0	18.9	48.7	0.94	22.6	21.6	0.41
53	15.3	19.2	53.9	1.02	22.8	27.2	0.51
54	15.5	19.4	59.0	1.09	23.0	32.8	0.61
55	15.7	19.6	64.1	1.17	23.2	38.3	0.70
56	16.0	19.8	69.1	1.23	23.4	43.7	0.78
57	16.2	20.0	74.0	1.30	23.5	49.1	0.86
58	16.5	20.2	78.9	1.36	23.7	54.4	0.94
59	16.7	20.5	83.7	1.42	23.9	59.6	1.01
60	16.9	20.7	88.4	1.47	24.1	64.7	1.08
61	17.2	20.9	93.0	1.52	24.3	69.7	1.14
62	17.4	21.1	97.6	1.57	24.5	74.7	1.20
63	17.6	21.4	102.1	1.62	24.7	79.6	1.26
64	17.9	21.6	106.6	1.67	24.9	84.4	1.32
65	18.1	21.8	110.9	1.71	25.1	89.2	1.37
66	18.3	22.0	115.3	1.75	25.3	93.8	1.42
67	18.5	22.3	119.5	1.78	25.5	98.5	1.47
68	18.7	22.5	123.7	1.82	25.8	103.0	1.51
69	18.9	22.7	127.8	1.85	26.0	107.5	1.56
70	19.2	23.0	131.9	1.88	26.2	111.9	1.60

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 15.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

A) NATURAL STANDS - SITE INDEX 16

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 247.5 AGE: 102 MAI: 2.43

LIMIT: 17.5+ VOLUME: 256.7 AGE: 110 MAI: 2.33

C.U. LESS DECAY VOLUME (12.5 cm+)					C.U. LESS DECAY VOLUME (17.5 cm+)				
TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI		
AGE (m)	(cm)	(m**3/ha)	(m**3/ha/yr)		(cm)	(m**3/ha)	(m**3/ha/yr)		
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00		
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00		
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00		
3	1.4	0.0	0.0	0.00	0.0	0.0	0.00		
4	1.6	0.0	0.0	0.00	0.0	0.0	0.00		
5	1.8	0.0	0.0	0.00	0.0	0.0	0.00		
6	2.0	0.0	0.0	0.00	0.0	0.0	0.00		
7	2.3	0.0	0.0	0.00	0.0	0.0	0.00		
8	2.5	0.0	0.0	0.00	0.0	0.0	0.00		
9	2.8	0.0	0.0	0.00	0.0	0.0	0.00		
10	3.1	0.0	0.0	0.00	0.0	0.0	0.00		
11	3.4	0.0	0.0	0.00	0.0	0.0	0.00		
12	3.7	0.0	0.0	0.00	0.0	0.0	0.00		
13	4.0	0.0	0.0	0.00	0.0	0.0	0.00		
14	4.3	0.0	0.0	0.00	0.0	0.0	0.00		
15	4.6	0.0	0.0	0.00	0.0	0.0	0.00		
16	5.0	0.0	0.0	0.00	0.0	0.0	0.00		
17	5.3	0.0	0.0	0.00	0.0	0.0	0.00		
18	5.6	0.0	0.0	0.00	0.0	0.0	0.00		
19	5.9	0.0	0.0	0.00	0.0	0.0	0.00		
20	6.3	0.0	0.0	0.00	0.0	0.0	0.00		
21	6.6	0.0	0.0	0.00	0.0	0.0	0.00		
22	6.9	0.0	0.0	0.00	0.0	0.0	0.00		
23	7.3	0.0	0.0	0.00	0.0	0.0	0.00		
24	7.6	0.0	0.0	0.00	0.0	0.0	0.00		
25	7.9	0.0	0.0	0.00	0.0	0.0	0.00		
26	8.3	0.0	0.0	0.00	0.0	0.0	0.00		
27	8.6	0.0	0.0	0.00	0.0	0.0	0.00		
28	8.9	0.0	0.0	0.00	0.0	0.0	0.00		
29	9.2	0.0	0.0	0.00	0.0	0.0	0.00		
30	9.5	0.0	0.0	0.00	0.0	0.0	0.00		
31	9.9	0.0	0.0	0.00	0.0	0.0	0.00		
32	10.2	0.0	0.0	0.00	0.0	0.0	0.00		
33	10.5	0.0	0.0	0.00	0.0	0.0	0.00		
34	10.8	0.0	0.0	0.00	0.0	0.0	0.00		
35	11.1	0.0	0.0	0.00	0.0	0.0	0.00		
36	11.4	0.0	0.0	0.00	0.0	0.0	0.00		
37	11.7	0.0	0.0	0.00	0.0	0.0	0.00		
38	12.0	0.0	0.0	0.00	0.0	0.0	0.00		
39	12.3	0.0	0.0	0.00	0.0	0.0	0.00		
40	12.6	0.0	0.0	0.00	0.0	0.0	0.00		
41	12.9	17.3	1.0	0.03	0.0	0.0	0.00		
42	13.2	17.6	7.2	0.17	0.0	0.0	0.00		

43	13.5	17.8	13.4	0.31	0.0	0.0	0.00
44	13.8	18.0	19.4	0.44	0.0	0.0	0.00
45	14.1	18.2	25.3	0.56	0.0	0.0	0.00
46	14.4	18.4	31.2	0.68	22.2	2.6	0.06
47	14.7	18.6	36.9	0.79	22.4	8.9	0.19
48	14.9	18.9	42.6	0.89	22.6	15.0	0.31
49	15.2	19.1	48.2	0.98	22.8	21.1	0.43
50	15.5	19.3	53.7	1.07	22.9	27.1	0.54
51	15.7	19.5	59.1	1.16	23.1	33.0	0.65
52	16.0	19.7	64.5	1.24	23.3	38.7	0.75
53	16.3	20.0	69.7	1.32	23.5	44.4	0.84
54	16.5	20.2	74.9	1.39	23.7	50.1	0.93
55	16.8	20.4	80.0	1.45	23.9	55.6	1.01
56	17.0	20.7	85.0	1.52	24.1	61.0	1.09
57	17.3	20.9	89.9	1.58	24.3	66.4	1.16
58	17.5	21.1	94.8	1.63	24.6	71.6	1.24
59	17.8	21.4	99.6	1.69	24.8	76.8	1.30
60	18.0	21.6	104.3	1.74	25.0	81.9	1.37
61	18.2	21.8	108.9	1.79	25.2	86.9	1.43
62	18.5	22.1	113.5	1.83	25.4	91.9	1.48
63	18.7	22.3	117.9	1.87	25.6	96.7	1.54
64	18.9	22.6	122.4	1.91	25.8	101.5	1.59
65	19.2	22.8	126.7	1.95	26.0	106.2	1.63
66	19.4	23.0	131.0	1.98	26.3	110.9	1.68
67	19.6	23.3	135.2	2.02	26.5	115.4	1.72
68	19.8	23.5	139.3	2.05	26.7	119.9	1.76
69	20.0	23.8	143.4	2.08	26.9	124.3	1.80
70	20.2	24.0	147.4	2.11	27.2	128.7	1.84

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 16.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

A) NATURAL STANDS - SITE INDEX 23

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 238.0 AGE: 68 MAI: 3.50
LIMIT: 17.5+ VOLUME: 244.3 AGE: 73 MAI: 3.35

AGE	TOT HT (m)	C.U. LESS DECAY VOLUME (12.5 cm+)			C.U. LESS DECAY VOLUME (17.5 cm+)		
		DIA (cm)	VOL (m**3/ha)	MAI (m**3/ha/yr)	DIA (cm)	VOL (m**3/ha)	MAI (m**3/ha/yr)
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00
3	1.5	0.0	0.0	0.00	0.0	0.0	0.00
4	1.9	0.0	0.0	0.00	0.0	0.0	0.00
5	2.2	0.0	0.0	0.00	0.0	0.0	0.00
6	2.7	0.0	0.0	0.00	0.0	0.0	0.00
7	3.1	0.0	0.0	0.00	0.0	0.0	0.00
8	3.6	0.0	0.0	0.00	0.0	0.0	0.00
9	4.1	0.0	0.0	0.00	0.0	0.0	0.00
10	4.7	0.0	0.0	0.00	0.0	0.0	0.00
11	5.2	0.0	0.0	0.00	0.0	0.0	0.00
12	5.7	0.0	0.0	0.00	0.0	0.0	0.00
13	6.3	0.0	0.0	0.00	0.0	0.0	0.00
14	6.8	0.0	0.0	0.00	0.0	0.0	0.00
15	7.3	0.0	0.0	0.00	0.0	0.0	0.00
16	7.9	0.0	0.0	0.00	0.0	0.0	0.00
17	8.4	0.0	0.0	0.00	0.0	0.0	0.00
18	8.9	0.0	0.0	0.00	0.0	0.0	0.00
19	9.5	0.0	0.0	0.00	0.0	0.0	0.00
20	10.0	0.0	0.0	0.00	0.0	0.0	0.00
21	10.5	0.0	0.0	0.00	0.0	0.0	0.00
22	11.0	0.0	0.0	0.00	0.0	0.0	0.00
23	11.5	0.0	0.0	0.00	0.0	0.0	0.00
24	12.0	0.0	0.0	0.00	0.0	0.0	0.00
25	12.5	0.0	0.0	0.00	0.0	0.0	0.00
26	13.0	0.0	0.0	0.00	0.0	0.0	0.00
27	13.5	0.0	0.0	0.00	0.0	0.0	0.00
28	14.0	17.5	1.5	0.05	0.0	0.0	0.00
29	14.4	17.8	10.7	0.37	0.0	0.0	0.00
30	14.9	18.1	19.6	0.65	0.0	0.0	0.00
31	15.3	18.5	28.4	0.92	0.0	0.0	0.00
32	15.8	18.8	36.9	1.15	22.7	8.9	0.28
33	16.2	19.1	45.3	1.37	23.0	18.0	0.54
34	16.6	19.5	53.4	1.57	23.3	26.8	0.79
35	17.0	19.8	61.3	1.75	23.6	35.4	1.01
36	17.4	20.1	69.1	1.92	23.9	43.8	1.22
37	17.8	20.4	76.6	2.07	24.2	52.0	1.41
38	18.2	20.8	84.0	2.21	24.5	60.0	1.58
39	18.6	21.1	91.2	2.34	24.7	67.8	1.74
40	19.0	21.4	98.2	2.46	25.0	75.4	1.88
41	19.4	21.8	105.0	2.56	25.3	82.8	2.02
42	19.7	22.1	111.7	2.66	25.6	90.0	2.14
43	20.1	22.4	118.2	2.75	25.9	97.0	2.26

44	20.4	22.7	124.6	2.83	26.2	103.9	2.36
45	20.8	23.1	130.7	2.91	26.5	110.6	2.46
46	21.1	23.4	136.8	2.97	26.8	117.1	2.55
47	21.4	23.7	142.6	3.03	27.1	123.5	2.63
48	21.8	24.1	148.4	3.09	27.3	129.7	2.70
49	22.1	24.4	154.0	3.14	27.6	135.7	2.77
50	22.4	24.7	159.4	3.19	27.9	141.6	2.83
51	22.7	25.0	164.8	3.23	28.2	147.4	2.89
52	23.0	25.4	169.9	3.27	28.5	153.0	2.94
53	23.3	25.7	175.0	3.30	28.8	158.5	2.99
54	23.6	26.0	180.0	3.33	29.1	163.8	3.03
55	23.9	26.3	184.8	3.36	29.4	169.0	3.07
56	24.1	26.7	189.5	3.38	29.7	174.1	3.11
57	24.4	27.0	194.1	3.40	30.0	179.1	3.14
58	24.7	27.3	198.6	3.42	30.3	183.9	3.17
59	24.9	27.6	202.9	3.44	30.5	188.6	3.20
60	25.2	28.0	207.2	3.45	30.8	193.3	3.22
61	25.4	28.3	211.4	3.47	31.1	197.8	3.24
62	25.7	28.6	215.5	3.48	31.4	202.2	3.26
63	25.9	28.9	219.5	3.48	31.7	206.5	3.28
64	26.2	29.3	223.3	3.49	32.0	210.7	3.29
65	26.4	29.6	227.1	3.49	32.3	214.8	3.30
66	26.6	29.9	230.9	3.50	32.6	218.8	3.31
67	26.8	30.2	234.5	3.50	32.9	222.7	3.32
68	27.1	30.6	238.0	3.50	33.2	226.5	3.33
69	27.3	30.9	241.5	3.50	33.5	230.2	3.34
70	27.5	31.2	244.9	3.50	33.8	233.9	3.34

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 23.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

NATURAL STANDS - SITE INDEX 25

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 238.3 AGE: 61 MAI: 3.91

LIMIT: 17.5+ VOLUME: 246.6 AGE: 66 MAI: 3.74

AGE	TOT (m)	HT (cm)	C.U. LESS DECAY VOLUME (12.5 cm+)			C.U. LESS DECAY VOLUME (17.5 cm+)		
			DIA (m**3/ha)	VOL (m**3/ha/yr)	MAI	DIA (cm)	VOL (m**3/ha)	MAI (m**3/ha/yr)
0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.00
1	0.6	0.0	0.0	0.0	0.00	0.0	0.0	0.00
2	1.3	0.0	0.0	0.0	0.00	0.0	0.0	0.00
3	1.6	0.0	0.0	0.0	0.00	0.0	0.0	0.00
4	2.0	0.0	0.0	0.0	0.00	0.0	0.0	0.00
5	2.4	0.0	0.0	0.0	0.00	0.0	0.0	0.00
6	2.9	0.0	0.0	0.0	0.00	0.0	0.0	0.00
7	3.5	0.0	0.0	0.0	0.00	0.0	0.0	0.00
8	4.0	0.0	0.0	0.0	0.00	0.0	0.0	0.00
9	4.6	0.0	0.0	0.0	0.00	0.0	0.0	0.00
10	5.2	0.0	0.0	0.0	0.00	0.0	0.0	0.00
11	5.8	0.0	0.0	0.0	0.00	0.0	0.0	0.00
12	6.4	0.0	0.0	0.0	0.00	0.0	0.0	0.00
13	7.0	0.0	0.0	0.0	0.00	0.0	0.0	0.00
14	7.6	0.0	0.0	0.0	0.00	0.0	0.0	0.00
15	8.3	0.0	0.0	0.0	0.00	0.0	0.0	0.00
16	8.9	0.0	0.0	0.0	0.00	0.0	0.0	0.00
17	9.5	0.0	0.0	0.0	0.00	0.0	0.0	0.00
18	10.1	0.0	0.0	0.0	0.00	0.0	0.0	0.00
19	10.6	0.0	0.0	0.0	0.00	0.0	0.0	0.00
20	11.2	0.0	0.0	0.0	0.00	0.0	0.0	0.00
21	11.8	0.0	0.0	0.0	0.00	0.0	0.0	0.00
22	12.4	0.0	0.0	0.0	0.00	0.0	0.0	0.00
23	12.9	0.0	0.0	0.0	0.00	0.0	0.0	0.00
24	13.5	0.0	0.0	0.0	0.00	0.0	0.0	0.00
25	14.0	0.0	0.0	0.0	0.00	0.0	0.0	0.00
26	14.5	17.7	8.8	0.34	0.0	0.0	0.0	0.00
27	15.1	18.0	18.8	0.70	0.0	0.0	0.0	0.00
28	15.6	18.4	28.6	1.02	0.0	0.0	0.0	0.00
29	16.1	18.7	38.2	1.32	22.7	10.3	0.36	
30	16.5	19.1	47.5	1.58	23.0	20.4	0.68	
31	17.0	19.5	56.5	1.82	23.4	30.2	0.97	
32	17.5	19.8	65.3	2.04	23.7	39.7	1.24	
33	17.9	20.2	73.9	2.24	24.0	49.0	1.49	
34	18.4	20.5	82.2	2.42	24.3	58.0	1.71	
35	18.8	20.9	90.3	2.58	24.6	66.8	1.91	
36	19.3	21.3	98.2	2.73	24.9	75.3	2.09	
37	19.7	21.6	105.8	2.86	25.3	83.6	2.26	
38	20.1	22.0	113.3	2.98	25.6	91.7	2.41	
39	20.5	22.4	120.5	3.09	25.9	99.5	2.55	
40	20.9	22.7	127.6	3.19	26.2	107.1	2.68	
41	21.3	23.1	134.4	3.28	26.5	114.5	2.79	
42	21.7	23.4	141.1	3.36	26.8	121.7	2.90	
43	22.0	23.8	147.5	3.43	27.2	128.7	2.99	

44	22.4	24.1	153.8	3.50	27.5	135.5	3.08
45	22.7	24.5	160.0	3.55	27.8	142.2	3.16
46	23.1	24.9	165.9	3.61	28.1	148.6	3.23
47	23.4	25.2	171.7	3.65	28.4	154.9	3.29
48	23.8	25.6	177.3	3.69	28.7	160.9	3.35
49	24.1	25.9	182.8	3.73	29.1	166.9	3.41
50	24.4	26.3	188.2	3.76	29.4	172.6	3.45
51	24.7	26.6	193.3	3.79	29.7	178.2	3.49
52	25.0	27.0	198.4	3.82	30.0	183.7	3.53
53	25.3	27.3	203.3	3.84	30.3	189.0	3.57
54	25.6	27.7	208.1	3.85	30.6	194.2	3.60
55	25.9	28.0	212.8	3.87	30.9	199.2	3.62
56	26.1	28.4	217.3	3.88	31.3	204.1	3.64
57	26.4	28.7	221.7	3.89	31.6	208.9	3.66
58	26.7	29.1	226.0	3.90	31.9	213.5	3.68
59	26.9	29.4	230.2	3.90	32.2	218.0	3.70
60	27.2	29.8	234.3	3.91	32.5	222.4	3.71
61	27.4	30.1	238.3	3.91	32.8	226.7	3.72
62	27.7	30.5	242.2	3.91	33.1	230.9	3.72
63	27.9	30.8	246.0	3.90	33.4	235.0	3.73
64	28.2	31.1	249.7	3.90	33.8	239.0	3.73
65	28.4	31.5	253.3	3.90	34.1	242.9	3.74
66	28.6	31.8	256.8	3.89	34.4	246.6	3.74
67	28.8	32.2	260.2	3.88	34.7	250.3	3.74
68	29.1	32.5	263.5	3.88	35.0	253.9	3.73
69	29.3	32.9	266.8	3.87	35.3	257.4	3.73
70	29.5	33.2	270.0	3.86	35.6	260.8	3.73

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 25.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

NATURAL STANDS - SITE INDEX 28

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 244.3 AGE: 53 MAI: 4.61
LIMIT: 17.5+ VOLUME: 251.7 AGE: 57 MAI: 4.42

AGE	C.U. LESS DECAY VOLUME (12.5 cm+)				C.U. LESS DECAY VOLUME (17.5 cm+)			
	TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI
(m)	(cm)	(m**3/ha)	(m**3/ha/yr)	(m**3/ha/yr)	(cm)	(m**3/ha)	(m**3/ha/yr)	(m**3/ha/yr)
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00	
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00	
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00	
3	1.6	0.0	0.0	0.00	0.0	0.0	0.00	
4	2.1	0.0	0.0	0.00	0.0	0.0	0.00	
5	2.7	0.0	0.0	0.00	0.0	0.0	0.00	
6	3.3	0.0	0.0	0.00	0.0	0.0	0.00	
7	4.0	0.0	0.0	0.00	0.0	0.0	0.00	
8	4.7	0.0	0.0	0.00	0.0	0.0	0.00	
9	5.4	0.0	0.0	0.00	0.0	0.0	0.00	
10	6.1	0.0	0.0	0.00	0.0	0.0	0.00	
11	6.8	0.0	0.0	0.00	0.0	0.0	0.00	
12	7.6	0.0	0.0	0.00	0.0	0.0	0.00	
13	8.3	0.0	0.0	0.00	0.0	0.0	0.00	
14	9.0	0.0	0.0	0.00	0.0	0.0	0.00	
15	9.8	0.0	0.0	0.00	0.0	0.0	0.00	
16	10.5	0.0	0.0	0.00	0.0	0.0	0.00	
17	11.2	0.0	0.0	0.00	0.0	0.0	0.00	
18	11.9	0.0	0.0	0.00	0.0	0.0	0.00	
19	12.5	0.0	0.0	0.00	0.0	0.0	0.00	
20	13.2	0.0	0.0	0.00	0.0	0.0	0.00	
21	13.9	0.0	0.0	0.00	0.0	0.0	0.00	
22	14.5	17.4	3.2	0.14	0.0	0.0	0.00	
23	15.1	17.7	15.2	0.66	0.0	0.0	0.00	
24	15.7	18.1	26.9	1.12	0.0	0.0	0.00	
25	16.3	18.5	38.3	1.53	22.6	10.4	0.42	
26	16.9	18.9	49.2	1.89	23.0	22.3	0.86	
27	17.5	19.3	59.9	2.22	23.3	33.8	1.25	
28	18.1	19.7	70.2	2.51	23.7	45.0	1.61	
29	18.6	20.2	80.2	2.77	24.1	55.8	1.93	
30	19.1	20.6	89.9	3.00	24.4	66.3	2.21	
31	19.7	21.0	99.2	3.20	24.8	76.4	2.47	
32	20.2	21.4	108.3	3.38	25.2	86.2	2.70	
33	20.7	21.8	117.0	3.55	25.5	95.7	2.90	
34	21.1	22.2	125.5	3.69	25.9	104.9	3.09	
35	21.6	22.6	133.7	3.82	26.2	113.8	3.25	
36	22.1	23.0	141.7	3.94	26.6	122.4	3.40	
37	22.5	23.5	149.4	4.04	27.0	130.7	3.53	
38	22.9	23.9	156.8	4.13	27.3	138.8	3.65	
39	23.4	24.3	164.1	4.21	27.7	146.6	3.76	
40	23.8	24.7	171.0	4.28	28.0	154.1	3.85	
41	24.2	25.1	177.8	4.34	28.4	161.4	3.94	
42	24.6	25.5	184.4	4.39	28.7	168.5	4.01	
43	25.0	25.9	190.7	4.43	29.1	175.3	4.08	
44	25.3	26.3	196.8	4.47	29.5	182.0	4.14	

45	25.7	26.7	202.8	4.51	29.8	188.4	4.19
46	26.0	27.1	208.6	4.53	30.2	194.6	4.23
47	26.4	27.5	214.2	4.56	30.5	200.6	4.27
48	26.7	27.9	219.6	4.57	30.9	206.5	4.30
49	27.1	28.2	224.8	4.59	31.2	212.1	4.33
50	27.4	28.6	229.9	4.60	31.6	217.6	4.35
51	27.7	29.0	234.9	4.61	31.9	223.0	4.37
52	28.0	29.4	239.7	4.61	32.3	228.1	4.39
53	28.3	29.8	244.3	4.61	32.6	233.1	4.40
54	28.6	30.2	248.9	4.61	33.0	238.0	4.41
55	28.9	30.6	253.2	4.60	33.3	242.7	4.41
56	29.2	31.0	257.5	4.60	33.7	247.3	4.42
57	29.4	31.3	261.6	4.59	34.0	251.7	4.42
58	29.7	31.7	265.6	4.58	34.3	256.0	4.41
59	29.9	32.1	269.5	4.57	34.7	260.2	4.41
60	30.2	32.5	273.3	4.56	35.0	264.3	4.41
61	30.4	32.8	277.0	4.54	35.4	268.3	4.40
62	30.7	33.2	280.6	4.53	35.7	272.1	4.39
63	30.9	33.6	284.0	4.51	36.1	275.8	4.38
64	31.2	34.0	287.4	4.49	36.4	279.5	4.37
65	31.4	34.3	290.7	4.47	36.7	283.0	4.35
66	31.6	34.7	293.9	4.45	37.1	286.4	4.34
67	31.8	35.1	297.0	4.43	37.4	289.8	4.32
68	32.0	35.4	300.0	4.41	37.7	293.0	4.31
69	32.2	35.8	303.0	4.39	38.1	296.2	4.29
70	32.4	36.2	305.8	4.37	38.4	299.2	4.27

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 28.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

A) NATURAL STANDS - SITE INDEX 32

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 252.2 AGE: 44 MAI: 5.73
LIMIT: 17.5+ VOLUME: 259.0 AGE: 47 MAI: 5.51

AGE	C.U. LESS DECAY VOLUME (12.5 cm+)				C.U. LESS DECAY VOLUME (17.5 cm+)			
	TOT (m)	HT (cm)	DIA (m**3/ha)	VOL (m**3/ha/yr)	MAI	DIA (cm)	VOL (m**3/ha)	MAI (m**3/ha/yr)
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00	
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00	
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00	
3	1.7	0.0	0.0	0.00	0.0	0.0	0.00	
4	2.4	0.0	0.0	0.00	0.0	0.0	0.00	
5	3.1	0.0	0.0	0.00	0.0	0.0	0.00	
6	3.9	0.0	0.0	0.00	0.0	0.0	0.00	
7	4.8	0.0	0.0	0.00	0.0	0.0	0.00	
8	5.7	0.0	0.0	0.00	0.0	0.0	0.00	
9	6.6	0.0	0.0	0.00	0.0	0.0	0.00	
10	7.5	0.0	0.0	0.00	0.0	0.0	0.00	
11	8.4	0.0	0.0	0.00	0.0	0.0	0.00	
12	9.3	0.0	0.0	0.00	0.0	0.0	0.00	
13	10.2	0.0	0.0	0.00	0.0	0.0	0.00	
14	11.1	0.0	0.0	0.00	0.0	0.0	0.00	
15	12.0	0.0	0.0	0.00	0.0	0.0	0.00	
16	12.8	0.0	0.0	0.00	0.0	0.0	0.00	
17	13.7	0.0	0.0	0.00	0.0	0.0	0.00	
18	14.5	0.0	0.0	0.00	0.0	0.0	0.00	
19	15.3	17.5	13.0	0.69	0.0	0.0	0.00	
20	16.1	17.9	27.6	1.38	0.0	0.0	0.00	
21	16.8	18.4	41.7	1.98	22.6	14.1	0.67	
22	17.6	18.8	55.2	2.51	23.0	28.8	1.31	
23	18.3	19.3	68.3	2.97	23.4	42.9	1.87	
24	19.0	19.8	80.8	3.37	23.8	56.5	2.36	
25	19.6	20.2	92.9	3.72	24.2	69.6	2.78	
26	20.3	20.7	104.5	4.02	24.6	82.2	3.16	
27	20.9	21.2	115.7	4.29	25.1	94.3	3.49	
28	21.6	21.7	126.4	4.52	25.5	105.9	3.78	
29	22.2	22.2	136.8	4.72	25.9	117.1	4.04	
30	22.7	22.7	146.7	4.89	26.4	127.8	4.26	
31	23.3	23.1	156.3	5.04	26.8	138.1	4.46	
32	23.9	23.6	165.5	5.17	27.2	148.0	4.63	
33	24.4	24.1	174.3	5.28	27.6	157.6	4.78	
34	24.9	24.6	182.8	5.38	28.0	166.8	4.90	
35	25.4	25.0	191.0	5.46	28.5	175.6	5.02	
36	25.9	25.5	198.9	5.52	28.9	184.1	5.11	
37	26.4	26.0	206.5	5.58	29.3	192.2	5.20	
38	26.8	26.4	213.7	5.62	29.7	200.1	5.27	
39	27.3	26.9	220.8	5.66	30.1	207.7	5.32	
40	27.7	27.3	227.5	5.69	30.5	215.0	5.37	
41	28.1	27.8	234.1	5.71	30.9	222.0	5.41	
42	28.5	28.2	240.3	5.72	31.3	228.7	5.45	
43	28.9	28.7	246.4	5.73	31.7	235.2	5.47	
44	29.3	29.2	252.2	5.73	32.1	241.5	5.49	

45	29.7	29.6	257.9	5.73	32.6	247.6	5.50
46	30.0	30.0	263.3	5.72	33.0	253.4	5.51
47	30.4	30.5	268.5	5.71	33.4	259.0	5.51
48	30.7	30.9	273.6	5.70	33.8	264.5	5.51
49	31.1	31.4	278.5	5.68	34.1	269.7	5.50
50	31.4	31.8	283.2	5.66	34.5	274.7	5.49
51	31.7	32.2	287.7	5.64	34.9	279.6	5.48
52	32.0	32.7	292.1	5.62	35.3	284.3	5.47
53	32.3	33.1	296.4	5.59	35.7	288.9	5.45
54	32.6	33.5	300.5	5.56	36.1	293.3	5.43
55	32.9	34.0	304.4	5.54	36.5	297.6	5.41
56	33.1	34.4	308.3	5.50	36.9	301.7	5.39
57	33.4	34.8	312.0	5.47	37.3	305.6	5.36
58	33.7	35.2	315.6	5.44	37.6	309.5	5.34
59	33.9	35.7	319.0	5.41	38.0	313.2	5.31
60	34.2	36.1	322.4	5.37	38.4	316.8	5.28
61	34.4	36.5	325.6	5.34	38.8	320.3	5.25
62	34.6	36.9	328.8	5.30	39.2	323.6	5.22
63	34.9	37.3	331.8	5.27	39.5	326.9	5.19
64	35.1	37.7	334.8	5.23	39.9	330.1	5.16
65	35.3	38.1	337.6	5.19	40.3	333.1	5.13
66	35.5	38.5	340.4	5.16	40.7	336.1	5.09
67	35.7	38.9	343.1	5.12	41.0	339.0	5.06
68	35.9	39.3	345.7	5.08	41.4	341.8	5.03
69	36.1	39.7	348.2	5.05	41.8	344.5	4.99
70	36.3	40.1	350.7	5.01	42.1	347.1	4.96

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 32.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

A) NATURAL STANDS - SITE INDEX 33

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 254.0 AGE: 42 MAI: 6.05
LIMIT: 17.5+ VOLUME: 261.9 AGE: 45 MAI: 5.82

C.U. LESS DECAY VOLUME (12.5 cm+)					C.U. LESS DECAY VOLUME (17.5 cm+)				
TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI		
AGE	(m)	(cm)	(m**3/ha)	(m**3/ha/yr)	(cm)	(m**3/ha)	(m**3/ha/yr)		
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00		
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00		
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00		
3	1.8	0.0	0.0	0.00	0.0	0.0	0.00		
4	2.4	0.0	0.0	0.00	0.0	0.0	0.00		
5	3.2	0.0	0.0	0.00	0.0	0.0	0.00		
6	4.1	0.0	0.0	0.00	0.0	0.0	0.00		
7	5.0	0.0	0.0	0.00	0.0	0.0	0.00		
8	6.0	0.0	0.0	0.00	0.0	0.0	0.00		
9	6.9	0.0	0.0	0.00	0.0	0.0	0.00		
10	7.9	0.0	0.0	0.00	0.0	0.0	0.00		
11	8.8	0.0	0.0	0.00	0.0	0.0	0.00		
12	9.8	0.0	0.0	0.00	0.0	0.0	0.00		
13	10.7	0.0	0.0	0.00	0.0	0.0	0.00		
14	11.7	0.0	0.0	0.00	0.0	0.0	0.00		
15	12.6	0.0	0.0	0.00	0.0	0.0	0.00		
16	13.5	0.0	0.0	0.00	0.0	0.0	0.00		
17	14.3	0.0	0.0	0.00	0.0	0.0	0.00		
18	15.2	17.4	10.0	0.56	0.0	0.0	0.00		
19	16.0	17.8	25.5	1.34	0.0	0.0	0.00		
20	16.8	18.3	40.4	2.02	22.5	12.7	0.64		
21	17.6	18.8	54.7	2.61	22.9	28.3	1.35		
22	18.4	19.2	68.5	3.12	23.4	43.2	1.96		
23	19.1	19.7	81.8	3.56	23.8	57.6	2.50		
24	19.8	20.2	94.5	3.94	24.2	71.3	2.97		
25	20.5	20.7	106.7	4.27	24.6	84.6	3.38		
26	21.2	21.2	118.5	4.56	25.1	97.3	3.74		
27	21.8	21.7	129.7	4.80	25.5	109.4	4.05		
28	22.5	22.2	140.5	5.02	26.0	121.1	4.33		
29	23.1	22.7	150.9	5.20	26.4	132.3	4.56		
30	23.7	23.2	160.9	5.36	26.9	143.1	4.77		
31	24.2	23.7	170.5	5.50	27.3	153.4	4.95		
32	24.8	24.2	179.7	5.61	27.7	163.3	5.10		
33	25.3	24.7	188.5	5.71	28.2	172.9	5.24		
34	25.9	25.1	197.0	5.79	28.6	182.0	5.35		
35	26.4	25.6	205.1	5.86	29.0	190.8	5.45		
36	26.9	26.1	212.9	5.92	29.5	199.2	5.53		
37	27.3	26.6	220.5	5.96	29.9	207.3	5.60		
38	27.8	27.1	227.7	5.99	30.3	215.1	5.66		
39	28.2	27.5	234.7	6.02	30.7	222.6	5.71		
40	28.7	28.0	241.4	6.03	31.2	229.8	5.74		
41	29.1	28.5	247.8	6.04	31.6	236.7	5.77		
42	29.5	28.9	254.0	6.05	32.0	243.4	5.79		
43	29.9	29.4	260.0	6.05	32.4	249.8	5.81		
44	30.3	29.9	265.7	6.04	32.8	256.0	5.82		

45	30.7	30.3	271.2	6.03	33.2	261.9	5.82
46	31.0	30.8	276.6	6.01	33.7	267.6	5.82
47	31.4	31.3	281.7	5.99	34.1	273.1	5.81
48	31.7	31.7	286.6	5.97	34.5	278.4	5.80
49	32.1	32.2	291.4	5.95	34.9	283.6	5.79
50	32.4	32.6	296.0	5.92	35.3	288.5	5.77
51	32.7	33.1	300.5	5.89	35.7	293.3	5.75
52	33.0	33.5	304.8	5.86	36.1	297.9	5.73
53	33.3	33.9	308.9	5.83	36.5	302.3	5.70
54	33.6	34.4	312.9	5.79	36.9	306.6	5.68
55	33.9	34.8	316.7	5.76	37.3	310.7	5.65
56	34.1	35.3	320.5	5.72	37.7	314.7	5.62
57	34.4	35.7	324.1	5.69	38.1	318.5	5.59
58	34.7	36.1	327.5	5.65	38.5	322.3	5.56
59	34.9	36.6	330.9	5.61	38.9	325.9	5.52
60	35.2	37.0	334.2	5.57	39.3	329.3	5.49
61	35.4	37.4	337.3	5.53	39.6	332.7	5.45
62	35.6	37.8	340.3	5.49	40.0	336.0	5.42
63	35.9	38.3	343.3	5.45	40.4	339.1	5.38
64	36.1	38.7	346.1	5.41	40.8	342.2	5.35
65	36.3	39.1	348.9	5.37	41.2	345.1	5.31
66	36.5	39.5	351.6	5.33	41.6	347.9	5.27
67	36.7	39.9	354.1	5.29	41.9	350.7	5.23
68	36.9	40.3	356.6	5.24	42.3	353.4	5.20
69	37.1	40.7	359.1	5.20	42.7	356.0	5.16
70	37.3	41.1	361.4	5.16	43.1	358.5	5.12

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 33.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

NATURAL STANDS - SITE INDEX 34

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 255.0 AGE: 40 MAI: 6.38

LIMIT: 17.5+ VOLUME: 264.2 AGE: 43 MAI: 6.14

AGE	C.U. LESS DECAY VOLUME (12.5 cm+)			C.U. LESS DECAY VOLUME (17.5 cm+)		
	TOT (m)	HT (cm)	MAI (m**3/ha)	TOT (m)	HT (cm)	MAI (m**3/ha)
0	0.0	0.0	0.00	0.0	0.0	0.00
1	0.6	0.0	0.00	0.0	0.0	0.00
2	1.3	0.0	0.00	0.0	0.0	0.00
3	1.8	0.0	0.00	0.0	0.0	0.00
4	2.5	0.0	0.00	0.0	0.0	0.00
5	3.4	0.0	0.00	0.0	0.0	0.00
6	4.3	0.0	0.00	0.0	0.0	0.00
7	5.3	0.0	0.00	0.0	0.0	0.00
8	6.3	0.0	0.00	0.0	0.0	0.00
9	7.3	0.0	0.00	0.0	0.0	0.00
10	8.3	0.0	0.00	0.0	0.0	0.00
11	9.3	0.0	0.00	0.0	0.0	0.00
12	10.3	0.0	0.00	0.0	0.0	0.00
13	11.3	0.0	0.00	0.0	0.0	0.00
14	12.2	0.0	0.00	0.0	0.0	0.00
15	13.2	0.0	0.00	0.0	0.0	0.00
16	14.1	0.0	0.00	0.0	0.0	0.00
17	15.0	17.2	5.8	0.0	0.0	0.00
18	15.9	17.7	22.3	1.24	0.0	0.00
19	16.7	18.2	38.1	2.01	22.4	10.2
20	17.6	18.6	53.3	2.67	22.9	26.7
21	18.4	19.1	67.9	3.23	23.3	42.6
22	19.2	19.6	81.9	3.72	23.7	57.7
23	19.9	20.1	95.4	4.15	24.2	72.3
24	20.7	20.6	108.3	4.51	24.6	86.2
25	21.4	21.1	120.6	4.82	25.1	99.6
26	22.1	21.6	132.4	5.09	25.5	112.3
27	22.7	22.2	143.8	5.32	26.0	124.6
28	23.4	22.7	154.6	5.52	26.4	136.3
29	24.0	23.2	165.1	5.69	26.9	147.6
30	24.6	23.7	175.0	5.83	27.4	158.4
31	25.2	24.2	184.6	5.96	27.8	168.7
32	25.7	24.7	193.8	6.06	28.3	178.6
33	26.3	25.2	202.6	6.14	28.7	188.1
34	26.8	25.7	211.0	6.21	29.2	197.2
35	27.3	26.2	219.1	6.26	29.6	205.9
36	27.8	26.7	226.9	6.30	30.0	214.2
37	28.3	27.2	234.4	6.33	30.5	222.3
38	28.8	27.7	241.5	6.36	30.9	230.0
39	29.2	28.2	248.4	6.37	31.4	237.4
40	29.7	28.7	255.0	6.38	31.8	244.5
41	30.1	29.2	261.4	6.38	32.2	251.3
42	30.5	29.7	267.5	6.37	32.7	257.9
43	30.9	30.1	273.4	6.36	33.1	264.2
44	31.3	30.6	279.0	6.34	33.5	270.2
45	31.7	31.1	284.4	6.32	33.9	276.0

46	32.0	31.6	289.7	6.30	34.4	281.6	6.12
47	32.4	32.0	294.7	6.27	34.8	287.0	6.11
48	32.7	32.5	299.5	6.24	35.2	292.2	6.09
49	33.1	32.9	304.2	6.21	35.6	297.2	6.07
50	33.4	33.4	308.7	6.17	36.0	302.1	6.04
51	33.7	33.9	313.0	6.14	36.5	306.7	6.01
52	34.0	34.3	317.2	6.10	36.9	311.2	5.98
53	34.3	34.8	321.2	6.06	37.3	315.5	5.95
54	34.6	35.2	325.1	6.02	37.7	319.6	5.92
55	34.9	35.7	328.9	5.98	38.1	323.6	5.88
56	35.1	36.1	332.5	5.94	38.5	327.5	5.85
57	35.4	36.6	336.0	5.89	38.9	331.2	5.81
58	35.7	37.0	339.3	5.85	39.3	334.8	5.77
59	35.9	37.5	342.6	5.81	39.7	338.3	5.73
60	36.2	37.9	345.7	5.76	40.1	341.7	5.69
61	36.4	38.3	348.8	5.72	40.5	344.9	5.65
62	36.6	38.8	351.7	5.67	40.9	348.1	5.61
63	36.8	39.2	354.5	5.63	41.3	351.1	5.57
64	37.1	39.6	357.3	5.58	41.7	354.0	5.53
65	37.3	40.0	359.9	5.54	42.1	356.8	5.49
66	37.5	40.5	362.5	5.49	42.5	359.6	5.45
67	37.7	40.9	365.0	5.45	42.8	362.2	5.41
68	37.9	41.3	367.4	5.40	43.2	364.8	5.36
69	38.1	41.7	369.7	5.36	43.6	367.3	5.32
70	38.3	42.1	371.9	5.31	44.0	369.6	5.28

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 34.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

A) NATURAL STANDS - SITE INDEX 35

Stand Volume and Diameter Table, Air Method Poplar 100.0%

VOLUMES ARE PER HECTARE QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 262.0 AGE: 39 MAI: 6.72
LIMIT: 17.5+ VOLUME: 265.7 AGE: 41 MAI: 6.48

AGE	C.U. LESS DECAY VOLUME (12.5 cm+)				C.U. LESS DECAY VOLUME (17.5 cm+)			
	TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI
(m)	(cm)	(m)	(cm)	(m**3/ha)	(m**3/ha/yr)	(cm)	(m**3/ha)	(m**3/ha/yr)
0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.00
1	0.6	0.0	0.0	0.00	0.00	0.0	0.0	0.00
2	1.3	0.0	0.0	0.00	0.00	0.0	0.0	0.00
3	1.8	0.0	0.0	0.00	0.00	0.0	0.0	0.00
4	2.6	0.0	0.0	0.00	0.00	0.0	0.0	0.00
5	3.5	0.0	0.0	0.00	0.00	0.0	0.0	0.00
6	4.5	0.0	0.0	0.00	0.00	0.0	0.0	0.00
7	5.5	0.0	0.0	0.00	0.00	0.0	0.0	0.00
8	6.6	0.0	0.0	0.00	0.00	0.0	0.0	0.00
9	7.6	0.0	0.0	0.00	0.00	0.0	0.0	0.00
10	8.7	0.0	0.0	0.00	0.00	0.0	0.0	0.00
11	9.7	0.0	0.0	0.00	0.00	0.0	0.0	0.00
12	10.8	0.0	0.0	0.00	0.00	0.0	0.0	0.00
13	11.8	0.0	0.0	0.00	0.00	0.0	0.0	0.00
14	12.8	0.0	0.0	0.00	0.00	0.0	0.0	0.00
15	13.8	0.0	0.0	0.00	0.00	0.0	0.0	0.00
16	14.8	17.1	0.3	0.02	0.00	0.0	0.0	0.00
17	15.7	17.5	17.9	1.05	0.00	0.0	0.0	0.00
18	16.6	18.0	34.7	1.93	22.3	6.5	0.36	
19	17.5	18.5	50.9	2.68	22.7	24.1	1.27	
20	18.4	19.0	66.4	3.32	23.2	40.9	2.04	
21	19.2	19.5	81.2	3.87	23.6	56.9	2.71	
22	20.0	20.0	95.4	4.34	24.1	72.3	3.29	
23	20.8	20.5	109.0	4.74	24.6	87.0	3.78	
24	21.5	21.1	122.0	5.08	25.0	101.1	4.21	
25	22.2	21.6	134.5	5.38	25.5	114.6	4.58	
26	22.9	22.1	146.4	5.63	26.0	127.4	4.90	
27	23.6	22.6	157.8	5.84	26.4	139.7	5.18	
28	24.3	23.2	168.7	6.03	26.9	151.5	5.41	
29	24.9	23.7	179.2	6.18	27.4	162.8	5.61	
30	25.5	24.3	189.1	6.30	27.9	173.5	5.78	
31	26.1	24.8	198.7	6.41	28.3	183.8	5.93	
32	26.7	25.3	207.9	6.50	28.8	193.7	6.05	
33	27.3	25.8	216.6	6.56	29.3	203.1	6.16	
34	27.8	26.3	225.0	6.62	29.7	212.2	6.24	
35	28.3	26.9	233.1	6.66	30.2	220.8	6.31	
36	28.8	27.4	240.8	6.69	30.6	229.1	6.36	
37	29.3	27.9	248.2	6.71	31.1	237.1	6.41	
38	29.8	28.4	255.2	6.72	31.5	244.7	6.44	
39	30.2	28.9	262.0	6.72	32.0	252.0	6.46	
40	30.7	29.4	268.6	6.71	32.4	259.0	6.47	
41	31.1	29.9	274.8	6.70	32.9	265.7	6.48	
42	31.5	30.4	280.8	6.69	33.3	272.1	6.48	
43	31.9	30.8	286.6	6.66	33.8	278.3	6.47	
44	32.3	31.3	292.1	6.64	34.2	284.3	6.46	

45	32.7	31.8	297.5	6.61	34.6	290.0	6.44
46	33.0	32.3	302.6	6.58	35.1	295.5	6.42
47	33.4	32.8	307.5	6.54	35.5	300.7	6.40
48	33.7	33.3	312.2	6.51	35.9	305.8	6.37
49	34.1	33.7	316.8	6.47	36.4	310.7	6.34
50	34.4	34.2	321.2	6.42	36.8	315.4	6.31
51	34.7	34.7	325.4	6.38	37.2	319.9	6.27
52	35.0	35.1	329.5	6.34	37.6	324.3	6.24
53	35.3	35.6	333.4	6.29	38.1	328.4	6.20
54	35.6	36.1	337.2	6.24	38.5	332.5	6.16
55	35.9	36.5	340.8	6.20	38.9	336.4	6.12
56	36.1	37.0	344.3	6.15	39.3	340.1	6.07
57	36.4	37.4	347.7	6.10	39.7	343.7	6.03
58	36.6	37.9	350.9	6.05	40.1	347.2	5.99
59	36.9	38.3	354.1	6.00	40.6	350.5	5.94
60	37.1	38.8	357.1	5.95	41.0	353.8	5.90
61	37.4	39.2	360.0	5.90	41.4	356.9	5.85
62	37.6	39.7	362.9	5.85	41.8	359.9	5.81
63	37.8	40.1	365.6	5.80	42.2	362.8	5.76
64	38.0	40.6	368.2	5.75	42.6	365.6	5.71
65	38.3	41.0	370.8	5.70	43.0	368.4	5.67
66	38.5	41.4	373.2	5.66	43.4	371.0	5.62
67	38.7	41.8	375.6	5.61	43.8	373.5	5.57
68	38.9	42.3	377.9	5.56	44.1	376.0	5.53
69	39.1	42.7	380.1	5.51	44.5	378.3	5.48
70	39.2	43.1	382.3	5.46	44.9	380.6	5.44

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 35.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

A) NATURAL STANDS - SITE INDEX 36

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 261.8 AGE: 37 MAI: 7.08

LIMIT: 17.5+ VOLUME: 273.3 AGE: 40 MAI: 6.83

C.U. LESS DECAY VOLUME (12.5 cm+)				C.U. LESS DECAY VOLUME (17.5 cm+)			
TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI
AGE (m)	(cm)	(m**3/ha)	(m**3/ha/yr)		(cm)	(m**3/ha)	(m**3/ha/yr)
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00
3	1.9	0.0	0.0	0.00	0.0	0.0	0.00
4	2.7	0.0	0.0	0.00	0.0	0.0	0.00
5	3.6	0.0	0.0	0.00	0.0	0.0	0.00
6	4.7	0.0	0.0	0.00	0.0	0.0	0.00
7	5.8	0.0	0.0	0.00	0.0	0.0	0.00
8	6.9	0.0	0.0	0.00	0.0	0.0	0.00
9	8.0	0.0	0.0	0.00	0.0	0.0	0.00
10	9.1	0.0	0.0	0.00	0.0	0.0	0.00
11	10.2	0.0	0.0	0.00	0.0	0.0	0.00
12	11.3	0.0	0.0	0.00	0.0	0.0	0.00
13	12.4	0.0	0.0	0.00	0.0	0.0	0.00
14	13.4	0.0	0.0	0.00	0.0	0.0	0.00
15	14.4	0.0	0.0	0.00	0.0	0.0	0.00
16	15.4	17.3	12.1	0.75	0.0	0.0	0.00
17	16.4	17.8	30.0	1.77	22.2	1.5	0.09
18	17.3	18.3	47.2	2.62	22.6	20.1	1.12
19	18.3	18.8	63.7	3.35	23.1	38.0	2.00
20	19.1	19.4	79.5	3.97	23.5	55.1	2.75
21	20.0	19.9	94.5	4.50	24.0	71.4	3.40
22	20.8	20.4	108.9	4.95	24.5	87.0	3.95
23	21.6	21.0	122.7	5.34	25.0	101.8	4.43
24	22.4	21.5	135.8	5.66	25.4	116.0	4.83
25	23.1	22.0	148.4	5.94	25.9	129.6	5.18
26	23.9	22.6	160.4	6.17	26.4	142.5	5.48
27	24.5	23.1	171.8	6.36	26.9	154.9	5.74
28	25.2	23.7	182.8	6.53	27.4	166.6	5.95
29	25.9	24.3	193.2	6.66	27.9	177.9	6.13
30	26.5	24.8	203.2	6.77	28.4	188.7	6.29
31	27.1	25.4	212.7	6.86	28.9	198.9	6.42
32	27.7	25.9	221.8	6.93	29.4	208.7	6.52
33	28.2	26.4	230.5	6.99	29.8	218.1	6.61
34	28.8	26.9	238.9	7.03	30.3	227.1	6.68
35	29.3	27.5	246.9	7.05	30.8	235.7	6.73
36	29.8	28.0	254.5	7.07	31.2	243.9	6.77
37	30.3	28.5	261.8	7.08	31.7	251.7	6.80
38	30.8	29.0	268.8	7.07	32.2	259.2	6.82
39	31.2	29.5	275.5	7.06	32.6	266.4	6.83
40	31.7	30.1	281.9	7.05	33.1	273.3	6.83
41	32.1	30.6	288.1	7.03	33.5	279.9	6.83
42	32.5	31.1	294.0	7.00	34.0	286.2	6.82
43	32.9	31.6	299.7	6.97	34.5	292.3	6.80

44	33.3	32.1	305.1	6.93	34.9	298.1	6.78
45	33.7	32.6	310.3	6.90	35.3	303.7	6.75
46	34.0	33.1	315.3	6.86	35.8	309.1	6.72
47	34.4	33.6	320.1	6.81	36.2	314.2	6.69
48	34.7	34.0	324.8	6.77	36.7	319.2	6.65
49	35.1	34.5	329.2	6.72	37.1	323.9	6.61
50	35.4	35.0	333.5	6.67	37.6	328.5	6.57
51	35.7	35.5	337.6	6.62	38.0	332.9	6.53
52	36.0	36.0	341.6	6.57	38.4	337.1	6.48
53	36.3	36.4	345.4	6.52	38.9	341.2	6.44
54	36.6	36.9	349.0	6.46	39.3	345.1	6.39
55	36.9	37.4	352.5	6.41	39.7	348.9	6.34
56	37.1	37.9	355.9	6.36	40.1	352.5	6.29
57	37.4	38.3	359.2	6.30	40.6	356.0	6.24
58	37.6	38.8	362.4	6.25	41.0	359.3	6.20
59	37.9	39.2	365.4	6.19	41.4	362.6	6.15
60	38.1	39.7	368.3	6.14	41.8	365.7	6.09
61	38.4	40.2	371.1	6.08	42.2	368.7	6.04
62	38.6	40.6	373.9	6.03	42.6	371.6	5.99
63	38.8	41.1	376.5	5.98	43.1	374.4	5.94
64	39.0	41.5	379.0	5.92	43.5	377.1	5.89
65	39.2	41.9	381.5	5.87	43.9	379.7	5.84
66	39.4	42.4	383.8	5.82	44.3	382.2	5.79
67	39.6	42.8	386.1	5.76	44.7	384.6	5.74
68	39.8	43.2	388.3	5.71	45.1	386.9	5.69
69	40.0	43.7	390.4	5.66	45.5	389.2	5.64
70	40.2	44.1	392.4	5.61	45.9	391.4	5.59

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 36.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

NATURAL STANDS - SITE INDEX 37

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 268.1 AGE: 36 MAI: 7.45
LIMIT: 17.5+ VOLUME: 273.6 AGE: 38 MAI: 7.20

C.U. LESS DECAY VOLUME (12.5 cm+)				C.U. LESS DECAY VOLUME (17.5 cm+)			
TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI
AGE (m)	(cm)	(m**3/ha)	(m**3/ha/yr)	(cm)	(m**3/ha)	(m**3/ha/yr)	
1	0.6	0.0	0.00	0.0	0.0	0.00	
2	1.3	0.0	0.00	0.0	0.0	0.00	
3	1.9	0.0	0.00	0.0	0.0	0.00	
4	2.8	0.0	0.00	0.0	0.0	0.00	
5	3.8	0.0	0.00	0.0	0.0	0.00	
6	4.9	0.0	0.00	0.0	0.0	0.00	
7	6.0	0.0	0.00	0.0	0.0	0.00	
8	7.2	0.0	0.00	0.0	0.0	0.00	
9	8.4	0.0	0.00	0.0	0.0	0.00	
10	9.5	0.0	0.00	0.0	0.0	0.00	
11	10.7	0.0	0.00	0.0	0.0	0.00	
12	11.8	0.0	0.00	0.0	0.0	0.00	
13	12.9	0.0	0.00	0.0	0.0	0.00	
14	14.0	0.0	0.00	0.0	0.0	0.00	
15	15.1	17.1	4.8	0.32	0.0	0.0	0.00
16	16.1	17.6	24.0	1.50	0.0	0.0	0.00
17	17.1	18.1	42.3	2.49	22.5	14.8	0.87
18	18.1	18.7	59.9	3.33	22.9	33.9	1.88
19	19.0	19.2	76.7	4.04	23.4	52.0	2.74
20	19.9	19.7	92.7	4.63	23.9	69.4	3.47
21	20.8	20.3	108.0	5.14	24.4	85.9	4.09
22	21.7	20.8	122.5	5.57	24.9	101.6	4.62
23	22.5	21.4	136.4	5.93	25.4	116.6	5.07
24	23.3	22.0	149.7	6.24	25.9	130.9	5.46
25	24.0	22.5	162.3	6.49	26.4	144.6	5.78
26	24.8	23.1	174.3	6.70	26.9	157.6	6.06
27	25.5	23.6	185.8	6.88	27.4	169.9	6.29
28	26.1	24.2	196.7	7.03	27.9	181.7	6.49
29	26.8	24.8	207.2	7.14	28.4	193.0	6.65
30	27.4	25.4	217.1	7.24	28.9	203.7	6.79
31	28.0	25.9	226.6	7.31	29.4	213.9	6.90
32	28.6	26.5	235.7	7.37	29.9	223.7	6.99
33	29.2	27.0	244.4	7.41	30.4	233.0	7.06
34	29.8	27.6	252.6	7.43	30.9	241.8	7.11
35	30.3	28.1	260.5	7.44	31.4	250.3	7.15
36	30.8	28.6	268.1	7.45	31.8	258.4	7.18
37	31.3	29.2	275.3	7.44	32.3	266.2	7.19
38	31.8	29.7	282.2	7.43	32.8	273.6	7.20
39	32.2	30.2	288.8	7.41	33.3	280.7	7.20
40	32.7	30.7	295.2	7.38	33.7	287.5	7.19
41	33.1	31.3	301.2	7.35	34.2	293.9	7.17
42	33.5	31.8	307.0	7.31	34.7	300.2	7.15
43	33.9	32.3	312.6	7.27	35.1	306.1	7.12
44	34.3	32.8	317.9	7.23	35.6	311.8	7.09
45	34.7	33.3	323.0	7.18	36.1	317.3	7.05

46	35.0	33.8	327.9	7.13	36.5	322.5	7.01
47	35.4	34.3	332.6	7.08	37.0	327.5	6.97
48	35.7	34.8	337.1	7.02	37.4	332.3	6.92
49	36.1	35.3	341.5	6.97	37.9	337.0	6.88
50	36.4	35.8	345.6	6.91	38.3	341.4	6.83
51	36.7	36.3	349.6	6.86	38.8	345.7	6.78
52	37.0	36.8	353.4	6.80	39.2	349.8	6.73
53	37.3	37.3	357.1	6.74	39.7	353.7	6.67
54	37.6	37.8	360.7	6.68	40.1	357.5	6.62
55	37.9	38.2	364.1	6.62	40.5	361.1	6.57
56	38.1	38.7	367.4	6.56	41.0	364.6	6.51
57	38.4	39.2	370.5	6.50	41.4	368.0	6.46
58	38.6	39.7	373.6	6.44	41.8	371.2	6.40
59	38.9	40.1	376.5	6.38	42.2	374.3	6.34
60	39.1	40.6	379.3	6.32	42.7	377.3	6.29
61	39.3	41.1	382.0	6.26	43.1	380.2	6.23
62	39.6	41.5	384.6	6.20	43.5	383.0	6.18
63	39.8	42.0	387.2	6.15	43.9	385.7	6.12
64	40.0	42.4	389.6	6.09	44.4	388.3	6.07
65	40.2	42.9	391.9	6.03	44.8	390.8	6.01
66	40.4	43.3	394.2	5.97	45.2	393.2	5.96
67	40.6	43.8	396.4	5.92	45.6	395.5	5.90
68	40.8	44.2	398.5	5.86	46.0	397.7	5.85
69	41.0	44.7	400.5	5.80	46.4	399.8	5.79
70	41.2	45.1	402.4	5.75	46.8	401.9	5.74

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 1
SI (BHA 50) Calc/Supplied 37.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

A) NATURAL STANDS - SITE INDEX 40

Stand Volume and Diameter Table, Air Method Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 276.7 AGE: 32 MAI: 8.65

LIMIT: 17.5+ VOLUME: 285.3 AGE: 34 MAI: 8.39

C.U. LESS DECAY VOLUME (12.5 cm+)				C.U. LESS DECAY VOLUME (17.5 cm+)			
TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI
AGE (m)	(cm)	(m**3/ha)	(m**3/ha/yr)	(cm)	(m**3/ha)	(m**3/ha/yr)	
0	0.0	0.0	0.00	0.0	0.0	0.00	
1	0.6	0.0	0.00	0.0	0.0	0.00	
2	1.3	0.0	0.00	0.0	0.0	0.00	
3	2.0	0.0	0.00	0.0	0.0	0.00	
4	3.0	0.0	0.00	0.0	0.0	0.00	
5	4.2	0.0	0.00	0.0	0.0	0.00	
6	5.5	0.0	0.00	0.0	0.0	0.00	
7	6.8	0.0	0.00	0.0	0.0	0.00	
8	8.2	0.0	0.00	0.0	0.0	0.00	
9	9.5	0.0	0.00	0.0	0.0	0.00	
10	10.9	0.0	0.00	0.0	0.0	0.00	
11	12.2	0.0	0.00	0.0	0.0	0.00	
12	13.5	0.0	0.00	0.0	0.0	0.00	
13	14.7	0.0	0.00	0.0	0.0	0.00	
14	15.9	17.4	18.5	1.32	0.0	0.0	0.00
15	17.1	17.9	40.0	2.67	12.3	0.82	
16	18.3	18.5	60.5	3.78	22.8	34.5	2.16
17	19.4	19.1	80.0	4.70	23.4	55.6	3.27
18	20.4	19.7	98.5	5.47	23.9	75.6	4.20
19	21.4	20.3	116.0	6.11	24.4	94.6	4.98
20	22.4	20.9	132.7	6.63	25.0	112.6	5.63
21	23.4	21.5	148.5	7.07	25.5	129.6	6.17
22	24.3	22.1	163.4	7.43	26.1	145.8	6.63
23	25.1	22.7	177.6	7.72	26.6	161.1	7.00
24	26.0	23.3	191.1	7.96	27.2	175.6	7.32
25	26.8	23.9	203.9	8.15	27.7	189.3	7.57
26	27.5	24.6	216.0	8.31	28.3	202.4	7.78
27	28.3	25.2	227.4	8.42	28.8	214.7	7.95
28	29.0	25.8	238.3	8.51	29.4	226.4	8.09
29	29.7	26.4	248.7	8.58	30.0	237.5	8.19
30	30.3	27.0	258.5	8.62	30.5	248.1	8.27
31	31.0	27.6	267.8	8.64	31.1	258.1	8.33
32	31.6	28.2	276.7	8.65	31.6	267.6	8.36
33	32.2	28.8	285.1	8.64	32.1	276.7	8.38
34	32.7	29.4	293.2	8.62	32.6	285.3	8.39
35	33.3	30.0	300.8	8.59	33.1	293.4	8.38
36	33.8	30.5	308.1	8.56	33.7	301.2	8.37
37	34.3	31.1	315.0	8.51	34.2	308.6	8.34
38	34.8	31.7	321.6	8.46	34.7	315.7	8.31
39	35.2	32.3	327.9	8.41	35.2	322.4	8.27
40	35.7	32.8	333.9	8.35	35.7	328.8	8.22
41	36.1	33.4	339.6	8.28	36.2	334.9	8.17
42	36.5	33.9	345.1	8.22	36.7	340.7	8.11
43	36.9	34.5	350.3	8.15	37.2	346.3	8.05

44	37.3	35.0	355.3	8.07	37.7	351.6	7.99
45	37.7	35.6	360.0	8.00	38.2	356.7	7.93
46	38.1	36.1	364.6	7.93	38.7	361.5	7.86
47	38.4	36.6	368.9	7.85	39.2	366.1	7.79
48	38.7	37.2	373.1	7.77	39.7	370.6	7.72
49	39.1	37.7	377.1	7.69	40.1	374.8	7.65
50	39.4	38.2	380.9	7.62	40.6	378.9	7.58
51	39.7	38.8	384.5	7.54	41.1	382.7	7.50
52	40.0	39.3	388.0	7.46	41.6	386.4	7.43
53	40.3	39.8	391.4	7.38	42.0	390.0	7.36
54	40.6	40.3	394.6	7.31	42.5	393.4	7.29
55	40.8	40.8	397.6	7.23	43.0	396.7	7.21
56	41.1	41.3	400.6	7.15	43.4	399.8	7.14
57	41.4	41.8	403.4	7.08	43.9	402.8	7.07
58	41.6	42.3	406.1	7.00	44.3	405.7	6.99
59	41.8	42.8	408.7	6.93	44.8	408.4	6.92
60	42.1	43.3	411.2	6.85	45.3	411.1	6.85
61	42.3	43.8	413.6	6.78	45.7	413.6	6.78
62	42.5	44.3	415.9	6.71	46.1	415.9	6.71
63	42.7	44.8	418.1	6.64	46.6	418.1	6.64
64	42.9	45.3	420.2	6.57	47.0	420.2	6.57
65	43.1	45.7	422.3	6.50	47.5	422.3	6.50
66	43.3	46.2	424.2	6.43	47.9	424.2	6.43
67	43.5	46.7	426.1	6.36	48.3	426.1	6.36
68	43.7	47.2	427.9	6.29	48.8	427.9	6.29
69	43.9	47.6	429.6	6.23	49.2	429.6	6.23
70	44.1	48.1	431.3	6.16	49.6	431.3	6.16

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 40.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

A) NATURAL STANDS - SITE INDEX 45

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 295.2 AGE: 27 MAI: 10.94
LIMIT: 17.5+ VOLUME: 298.7 AGE: 28 MAI: 10.67

C.U. LESS DECAY VOLUME (12.5 cm+)					C.U. LESS DECAY VOLUME (17.5 cm+)				
TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI		
AGE (m)	(cm)	(m**3/ha)	(m**3/ha/yr)		(cm)	(m**3/ha)	(m**3/ha/yr)		
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00		
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00		
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00		
3	2.2	0.0	0.0	0.00	0.0	0.0	0.00		
4	3.6	0.0	0.0	0.00	0.0	0.0	0.00		
5	5.1	0.0	0.0	0.00	0.0	0.0	0.00		
6	6.7	0.0	0.0	0.00	0.0	0.0	0.00		
7	8.4	0.0	0.0	0.00	0.0	0.0	0.00		
8	10.1	0.0	0.0	0.00	0.0	0.0	0.00		
9	11.7	0.0	0.0	0.00	0.0	0.0	0.00		
10	13.4	0.0	0.0	0.00	0.0	0.0	0.00		
11	15.0	0.0	0.0	0.00	0.0	0.0	0.00		
12	16.5	17.4	25.6	2.13	0.0	0.0	0.00		
13	18.0	18.1	52.2	4.02	22.5	25.5	1.96		
14	19.4	18.7	77.4	5.53	23.1	52.8	3.77		
15	20.8	19.4	101.1	6.74	23.7	78.4	5.23		
16	22.1	20.1	123.4	7.71	24.3	102.5	6.41		
17	23.3	20.8	144.3	8.49	25.0	125.1	7.36		
18	24.5	21.5	164.0	9.11	25.6	146.4	8.13		
19	25.7	22.2	182.5	9.60	26.3	166.3	8.75		
20	26.7	22.9	199.8	9.99	26.9	185.0	9.25		
21	27.8	23.6	216.1	10.29	27.5	202.5	9.64		
22	28.8	24.3	231.4	10.52	28.2	219.0	9.95		
23	29.7	25.0	245.8	10.69	28.8	234.4	10.19		
24	30.6	25.7	259.3	10.81	29.5	248.9	10.37		
25	31.5	26.4	272.0	10.88	30.1	262.5	10.50		
26	32.3	27.1	284.0	10.92	30.7	275.3	10.59		
27	33.1	27.8	295.2	10.94	31.4	287.4	10.64		
28	33.9	28.5	305.8	10.92	32.0	298.7	10.67		
29	34.6	29.2	315.8	10.89	32.6	309.4	10.67		
30	35.3	29.9	325.2	10.84	33.3	319.4	10.65		
31	35.9	30.6	334.1	10.78	33.9	328.9	10.61		
32	36.5	31.2	342.5	10.70	34.5	337.8	10.56		
33	37.1	31.9	350.4	10.62	35.0	346.3	10.49		
34	37.7	32.5	357.9	10.53	35.6	354.2	10.42		
35	38.3	33.2	364.9	10.43	36.2	361.8	10.34		
36	38.8	33.8	371.6	10.32	36.8	368.9	10.25		
37	39.3	34.4	378.0	10.21	37.4	375.6	10.15		
38	39.8	35.1	383.9	10.10	37.9	382.0	10.05		
39	40.3	35.7	389.6	9.99	38.5	388.0	9.95		
40	40.7	36.3	395.0	9.87	39.1	393.7	9.84		
41	41.2	36.9	400.1	9.76	39.6	399.1	9.73		
42	41.6	37.5	404.9	9.64	40.2	404.2	9.62		
43	42.0	38.1	409.5	9.52	40.7	409.1	9.51		
44	42.4	38.7	413.9	9.41	41.3	413.7	9.40		

45	42.7	39.3	418.0	9.29	41.8	418.0	9.29
46	43.1	39.9	422.0	9.17	42.4	422.0	9.17
47	43.4	40.5	425.7	9.06	42.9	425.7	9.06
48	43.8	41.1	429.3	8.94	43.4	429.3	8.94
49	44.1	41.7	432.7	8.83	44.0	432.7	8.83
50	44.4	42.3	435.9	8.72	44.5	435.9	8.72
51	44.7	42.9	439.0	8.61	45.0	439.0	8.61
52	45.0	43.4	441.9	8.50	45.5	441.9	8.50
53	45.3	44.0	444.6	8.39	46.1	444.6	8.39
54	45.6	44.6	447.3	8.28	46.6	447.3	8.28
55	45.8	45.1	449.8	8.18	47.1	449.8	8.18
56	46.1	45.7	452.2	8.08	47.6	452.2	8.08
57	46.3	46.2	454.5	7.97	48.1	454.5	7.97
58	46.6	46.8	456.7	7.87	48.6	456.7	7.87
59	46.8	47.3	458.7	7.78	49.1	458.7	7.78
60	47.0	47.9	460.7	7.68	49.6	460.7	7.68
61	47.2	48.4	462.6	7.58	50.1	462.6	7.58
62	47.4	48.9	464.4	7.49	50.6	464.4	7.49
63	47.6	49.5	466.1	7.40	51.1	466.1	7.40
64	47.8	50.0	467.7	7.31	51.5	467.7	7.31
65	48.0	50.5	469.3	7.22	52.0	469.3	7.22
66	48.2	51.0	470.7	7.13	52.5	470.7	7.13
67	48.4	51.5	472.1	7.05	53.0	472.1	7.05
68	48.6	52.1	473.5	6.96	53.4	473.5	6.96
69	48.7	52.6	474.7	6.88	53.9	474.7	6.88
70	48.9	53.1	475.9	6.80	54.4	475.9	6.80

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 45.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

A) NATURAL STANDS - SITE INDEX 49

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 295.2 AGE: 27 MAI: 10.94

LIMIT: 17.5+ VOLUME: 298.7 AGE: 28 MAI: 10.67

C.U. LESS DECAY VOLUME (12.5 cm+)					C.U. LESS DECAY VOLUME (17.5 cm+)				
TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI		
AGE (m)	(cm)	(m**3/ha)	(m**3/ha/yr)		(cm)	(m**3/ha)	(m**3/ha/yr)		
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00		
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00		
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00		
3	2.4	0.0	0.0	0.00	0.0	0.0	0.00		
4	4.0	0.0	0.0	0.00	0.0	0.0	0.00		
5	5.9	0.0	0.0	0.00	0.0	0.0	0.00		
6	7.8	0.0	0.0	0.00	0.0	0.0	0.00		
7	9.8	0.0	0.0	0.00	0.0	0.0	0.00		
8	11.8	0.0	0.0	0.00	0.0	0.0	0.00		
9	13.7	0.0	0.0	0.00	0.0	0.0	0.00		
10	15.6	0.0	0.0	0.00	0.0	0.0	0.00		
11	17.4	0.0	0.0	0.00	0.0	0.0	0.00		
12	19.1	17.4	25.6	2.13	0.0	0.0	0.00		
13	20.8	18.1	52.2	4.02	22.5	25.5	1.96		
14	22.3	18.7	77.4	5.53	23.1	52.8	3.77		
15	23.9	19.4	101.1	6.74	23.7	78.4	5.23		
16	25.3	20.1	123.4	7.71	24.3	102.5	6.41		
17	26.7	20.8	144.3	8.49	25.0	125.1	7.36		
18	28.0	21.5	164.0	9.11	25.6	146.4	8.13		
19	29.2	22.2	182.5	9.60	26.3	166.3	8.75		
20	30.4	22.9	199.8	9.99	26.9	185.0	9.25		
21	31.5	23.6	216.1	10.29	27.5	202.5	9.64		
22	32.5	24.3	231.4	10.52	28.2	219.0	9.95		
23	33.5	25.0	245.8	10.69	28.8	234.4	10.19		
24	34.5	25.7	259.3	10.81	29.5	248.9	10.37		
25	35.4	26.4	272.0	10.88	30.1	262.5	10.50		
26	36.2	27.1	284.0	10.92	30.7	275.3	10.59		
27	37.0	27.8	295.2	10.94	31.4	287.4	10.64		
28	37.8	28.5	305.8	10.92	32.0	298.7	10.67		
29	38.6	29.2	315.8	10.89	32.6	309.4	10.67		
30	39.3	29.9	325.2	10.84	33.3	319.4	10.65		
31	39.9	30.6	334.1	10.78	33.9	328.9	10.61		
32	40.6	31.2	342.5	10.70	34.5	337.8	10.56		
33	41.2	31.9	350.4	10.62	35.0	346.3	10.49		
34	41.8	32.5	357.9	10.53	35.6	354.2	10.42		
35	42.3	33.2	364.9	10.43	36.2	361.8	10.34		
36	42.9	33.8	371.6	10.32	36.8	368.9	10.25		
37	43.4	34.4	378.0	10.21	37.4	375.6	10.15		
38	43.9	35.1	383.9	10.10	37.9	382.0	10.05		
39	44.3	35.7	389.6	9.99	38.5	388.0	9.95		
40	44.8	36.3	395.0	9.87	39.1	393.7	9.84		
41	45.2	36.9	400.1	9.76	39.6	399.1	9.73		
42	45.6	37.5	404.9	9.64	40.2	404.2	9.62		
43	46.0	38.1	409.5	9.52	40.7	409.1	9.51		
44	46.4	38.7	413.9	9.41	41.3	413.7	9.40		

45	46.8	39.3	418.0	9.29	41.8	418.0	9.29
46	47.1	39.9	422.0	9.17	42.4	422.0	9.17
47	47.5	40.5	425.7	9.06	42.9	425.7	9.06
48	47.8	41.1	429.3	8.94	43.4	429.3	8.94
49	48.1	41.7	432.7	8.83	44.0	432.7	8.83
50	48.4	42.3	435.9	8.72	44.5	435.9	8.72
51	48.7	42.9	439.0	8.61	45.0	439.0	8.61
52	49.0	43.4	441.9	8.50	45.5	441.9	8.50
53	49.3	44.0	444.6	8.39	46.1	444.6	8.39
54	49.5	44.6	447.3	8.28	46.6	447.3	8.28
55	49.8	45.1	449.8	8.18	47.1	449.8	8.18
56	50.0	45.7	452.2	8.08	47.6	452.2	8.08
57	50.3	46.2	454.5	7.97	48.1	454.5	7.97
58	50.5	46.8	456.7	7.87	48.6	456.7	7.87
59	50.7	47.3	458.7	7.78	49.1	458.7	7.78
60	50.9	47.9	460.7	7.68	49.6	460.7	7.68
61	51.2	48.4	462.6	7.58	50.1	462.6	7.58
62	51.4	48.9	464.4	7.49	50.6	464.4	7.49
63	51.6	49.5	466.1	7.40	51.1	466.1	7.40
64	51.7	50.0	467.7	7.31	51.5	467.7	7.31
65	51.9	50.5	469.3	7.22	52.0	469.3	7.22
66	52.1	51.0	470.7	7.13	52.5	470.7	7.13
67	52.3	51.5	472.1	7.05	53.0	472.1	7.05
68	52.5	52.1	473.5	6.96	53.4	473.5	6.96
69	52.6	52.6	474.7	6.88	53.9	474.7	6.88
70	52.8	53.1	475.9	6.80	54.4	475.9	6.80

NOTE: Species 'AC' Vol/Dia computed using Species Default SI of 45.00

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.00 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 49.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

B) MANAGED STANDS - SITE INDEX 45

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 383.8 AGE: 27 MAI: 14.22
LIMIT: 17.5+ VOLUME: 388.3 AGE: 28 MAI: 13.87

C.U. LESS DECAY VOLUME (12.5 cm+)				C.U. LESS DECAY VOLUME (17.5 cm+)			
TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI
AGE (m)	(cm)	(m**3/ha)	(m**3/ha/yr)		(cm)	(m**3/ha)	(m**3/ha/yr)
0	0.0	0.0	0.00	0.0	0.0	0.00	0.00
1	0.6	0.0	0.00	0.0	0.0	0.00	0.00
2	1.3	0.0	0.00	0.0	0.0	0.00	0.00
3	2.2	0.0	0.00	0.0	0.0	0.00	0.00
4	3.6	0.0	0.00	0.0	0.0	0.00	0.00
5	5.1	0.0	0.00	0.0	0.0	0.00	0.00
6	6.7	0.0	0.00	0.0	0.0	0.00	0.00
7	8.4	0.0	0.00	0.0	0.0	0.00	0.00
8	10.1	0.0	0.00	0.0	0.0	0.00	0.00
9	11.7	0.0	0.00	0.0	0.0	0.00	0.00
10	13.4	0.0	0.00	0.0	0.0	0.00	0.00
11	15.0	0.0	0.00	0.0	0.0	0.00	0.00
12	16.5	17.4	33.3	2.77	0.0	0.0	0.00
13	18.0	18.1	67.9	5.22	22.5	33.2	2.55
14	19.4	18.7	100.6	7.18	23.1	68.6	4.90
15	20.8	19.4	131.4	8.76	23.7	101.9	6.80
16	22.1	20.1	160.4	10.02	24.3	133.3	8.33
17	23.3	20.8	187.6	11.04	25.0	162.7	9.57
18	24.5	21.5	213.2	11.84	25.6	190.3	10.57
19	25.7	22.2	237.2	12.49	26.3	216.2	11.38
20	26.7	22.9	259.8	12.99	26.9	240.5	12.02
21	27.8	23.6	281.0	13.38	27.5	263.3	12.54
22	28.8	24.3	300.9	13.68	28.2	284.7	12.94
23	29.7	25.0	319.6	13.89	28.8	304.7	13.25
24	30.6	25.7	337.1	14.05	29.5	323.6	13.48
25	31.5	26.4	353.7	14.15	30.1	341.3	13.65
26	32.3	27.1	369.2	14.20	30.7	358.0	13.77
27	33.1	27.8	383.8	14.22	31.4	373.6	13.84
28	33.9	28.5	397.6	14.20	32.0	388.3	13.87
29	34.6	29.2	410.6	14.16	32.6	402.2	13.87
30	35.3	29.9	422.8	14.09	33.3	415.3	13.84
31	35.9	30.6	434.3	14.01	33.9	427.6	13.79
32	36.5	31.2	445.2	13.91	34.5	439.2	13.73
33	37.1	31.9	455.5	13.80	35.0	450.2	13.64
34	37.7	32.5	465.2	13.68	35.6	460.5	13.54
35	38.3	33.2	474.4	13.55	36.2	470.3	13.44
36	38.8	33.8	483.1	13.42	36.8	479.5	13.32
37	39.3	34.4	491.3	13.28	37.4	488.3	13.20
38	39.8	35.1	499.1	13.13	37.9	496.6	13.07
39	40.3	35.7	506.5	12.99	38.5	504.4	12.93
40	40.7	36.3	513.5	12.84	39.1	511.8	12.80
41	41.2	36.9	520.1	12.69	39.6	518.8	12.65
42	41.6	37.5	526.4	12.53	40.2	525.5	12.51
43	42.0	38.1	532.4	12.38	40.7	531.8	12.37
44	42.4	38.7	538.1	12.23	41.3	537.8	12.22

45	42.7	39.3	543.5	12.08	41.8	543.5	12.08
46	43.1	39.9	548.6	11.93	42.4	548.6	11.93
47	43.4	40.5	553.4	11.78	42.9	553.4	11.78
48	43.8	41.1	558.1	11.63	43.4	558.1	11.63
49	44.1	41.7	562.5	11.48	44.0	562.5	11.48
50	44.4	42.3	566.7	11.33	44.5	566.7	11.33
51	44.7	42.9	570.6	11.19	45.0	570.6	11.19
52	45.0	43.4	574.4	11.05	45.5	574.4	11.05
53	45.3	44.0	578.0	10.91	46.1	578.0	10.91
54	45.6	44.6	581.5	10.77	46.6	581.5	10.77
55	45.8	45.1	584.7	10.63	47.1	584.7	10.63
56	46.1	45.7	587.9	10.50	47.6	587.9	10.50
57	46.3	46.2	590.8	10.37	48.1	590.8	10.37
58	46.6	46.8	593.7	10.24	48.6	593.7	10.24
59	46.8	47.3	596.4	10.11	49.1	596.4	10.11
60	47.0	47.9	598.9	9.98	49.6	598.9	9.98
61	47.2	48.4	601.4	9.86	50.1	601.4	9.86
62	47.4	48.9	603.7	9.74	50.6	603.7	9.74
63	47.6	49.5	605.9	9.62	51.1	605.9	9.62
64	47.8	50.0	608.0	9.50	51.5	608.0	9.50
65	48.0	50.5	610.0	9.39	52.0	610.0	9.39
66	48.2	51.0	611.9	9.27	52.5	611.9	9.27
67	48.4	51.5	613.8	9.16	53.0	613.8	9.16
68	48.6	52.1	615.5	9.05	53.4	615.5	9.05
69	48.7	52.6	617.2	8.94	53.9	617.2	8.94
70	48.9	53.1	618.7	8.84	54.4	618.7	8.84

NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block... 0
Adjustment Factor..... 1.30 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 45.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

B) MANAGED STANDS - SITE INDEX 49

Stand Volume and Diameter Table, Air Method
Poplar 100.0%

VOLUMES ARE PER HECTARE

QUADRATIC STAND DIAMETERS

CULMINATION VALUES

LIMIT: 12.5+ VOLUME: 383.8 AGE: 27 MAI: 14.22

LIMIT: 17.5+ VOLUME: 388.3 AGE: 28 MAI: 13.87

AGE	C.U. LESS DECAY VOLUME (12.5 cm+)				C.U. LESS DECAY VOLUME (17.5 cm+)			
	TOT	HT	DIA	VOL	MAI	DIA	VOL	MAI
(m)	(cm)	(cm)	(m**3/ha)	(m**3/ha/yr)	(cm)	(m**3/ha)	(m**3/ha/yr)	
0	0.0	0.0	0.0	0.00	0.0	0.0	0.00	
1	0.6	0.0	0.0	0.00	0.0	0.0	0.00	
2	1.3	0.0	0.0	0.00	0.0	0.0	0.00	
3	2.4	0.0	0.0	0.00	0.0	0.0	0.00	
4	4.0	0.0	0.0	0.00	0.0	0.0	0.00	
5	5.9	0.0	0.0	0.00	0.0	0.0	0.00	
6	7.8	0.0	0.0	0.00	0.0	0.0	0.00	
7	9.8	0.0	0.0	0.00	0.0	0.0	0.00	
8	11.8	0.0	0.0	0.00	0.0	0.0	0.00	
9	13.7	0.0	0.0	0.00	0.0	0.0	0.00	
10	15.6	0.0	0.0	0.00	0.0	0.0	0.00	
11	17.4	0.0	0.0	0.00	0.0	0.0	0.00	
12	19.1	17.4	33.3	2.77	0.0	0.0	0.00	
13	20.8	18.1	67.9	5.22	22.5	33.2	2.55	
14	22.3	18.7	100.6	7.18	23.1	68.6	4.90	
15	23.9	19.4	131.4	8.76	23.7	101.9	6.80	
16	25.3	20.1	160.4	10.02	24.3	133.3	8.33	
17	26.7	20.8	187.6	11.04	25.0	162.7	9.57	
18	28.0	21.5	213.2	11.84	25.6	190.3	10.57	
19	29.2	22.2	237.2	12.49	26.3	216.2	11.38	
20	30.4	22.9	259.8	12.99	26.9	240.5	12.02	
21	31.5	23.6	281.0	13.38	27.5	263.3	12.54	
22	32.5	24.3	300.9	13.68	28.2	284.7	12.94	
23	33.5	25.0	319.6	13.89	28.8	304.7	13.25	
24	34.5	25.7	337.1	14.05	29.5	323.6	13.48	
25	35.4	26.4	353.7	14.15	30.1	341.3	13.65	
26	36.2	27.1	369.2	14.20	30.7	358.0	13.77	
27	37.0	27.8	383.8	14.22	31.4	373.6	13.84	
28	37.8	28.5	397.6	14.20	32.0	388.3	13.87	
29	38.6	29.2	410.6	14.16	32.6	402.2	13.87	
30	39.3	29.9	422.8	14.09	33.3	415.3	13.84	
31	39.9	30.6	434.3	14.01	33.9	427.6	13.79	
32	40.6	31.2	445.2	13.91	34.5	439.2	13.73	
33	41.2	31.9	455.5	13.80	35.0	450.2	13.64	
34	41.8	32.5	465.2	13.68	35.6	460.5	13.54	
35	42.3	33.2	474.4	13.55	36.2	470.3	13.44	
36	42.9	33.8	483.1	13.42	36.8	479.5	13.32	
37	43.4	34.4	491.3	13.28	37.4	488.3	13.20	
38	43.9	35.1	499.1	13.13	37.9	496.6	13.07	
39	44.3	35.7	506.5	12.99	38.5	504.4	12.93	
40	44.8	36.3	513.5	12.84	39.1	511.8	12.80	
41	45.2	36.9	520.1	12.69	39.6	518.8	12.65	
42	45.6	37.5	526.4	12.53	40.2	525.5	12.51	
43	46.0	38.1	532.4	12.38	40.7	531.8	12.37	
44	46.4	38.7	538.1	12.23	41.3	537.8	12.22	

45	46.8	39.3	543.5	12.08	41.8	543.5	12.08
46	47.1	39.9	548.6	11.93	42.4	548.6	11.93
47	47.5	40.5	553.4	11.78	42.9	553.4	11.78
48	47.8	41.1	558.1	11.63	43.4	558.1	11.63
49	48.1	41.7	562.5	11.48	44.0	562.5	11.48
50	48.4	42.3	566.7	11.33	44.5	566.7	11.33
51	48.7	42.9	570.6	11.19	45.0	570.6	11.19
52	49.0	43.4	574.4	11.05	45.5	574.4	11.05
53	49.3	44.0	578.0	10.91	46.1	578.0	10.91
54	49.5	44.6	581.5	10.77	46.6	581.5	10.77
55	49.8	45.1	584.7	10.63	47.1	584.7	10.63
56	50.0	45.7	587.9	10.50	47.6	587.9	10.50
57	50.3	46.2	590.8	10.37	48.1	590.8	10.37
58	50.5	46.8	593.7	10.24	48.6	593.7	10.24
59	50.7	47.3	596.4	10.11	49.1	596.4	10.11
60	50.9	47.9	598.9	9.98	49.6	598.9	9.98
61	51.2	48.4	601.4	9.86	50.1	601.4	9.86
62	51.4	48.9	603.7	9.74	50.6	603.7	9.74
63	51.6	49.5	605.9	9.62	51.1	605.9	9.62
64	51.7	50.0	608.0	9.50	51.5	608.0	9.50
65	51.9	50.5	610.0	9.39	52.0	610.0	9.39
66	52.1	51.0	611.9	9.27	52.5	611.9	9.27
67	52.3	51.5	613.8	9.16	53.0	613.8	9.16
68	52.5	52.1	615.5	9.05	53.4	615.5	9.05
69	52.6	52.6	617.2	8.94	53.9	617.2	8.94
70	52.8	53.1	618.7	8.84	54.4	618.7	8.84

NOTE: Species 'AC' Vol/Dia computed using Species Default SI of 45.00
NOTE: Species 'AC' Vol/Dia computed using Species Default CC of 61.0%

TABLE PROPERTIES:

WinVDYP Version Number... 1.0 Stand Total Age..... < Not Used >
Core Version Number..... 6.4a % Crown Closure Supplied. 0.0
Species 1..... AC (100.0%) Measured Basal Area..... < Not Used >
Method..... Air Measured Basal Area Age.. < Not Used >
Forest Inventory Zone.... C Stocking Class..... 1
Utilization Level 1..... 12.5 PSYU Special Cruise #.... 000
Utilization Level 2..... 17.5 PSYU Subcode/TFL Block.... 0
Adjustment Factor..... 1.30 Starting Total Age..... 0
SI (BHA 50) Calc/Supplied 49.0 Finishing Total Age..... 70
Stand Height (m)..... < Not Used > Age Increment..... 1
Waste and Breakage File.. < Not Used >

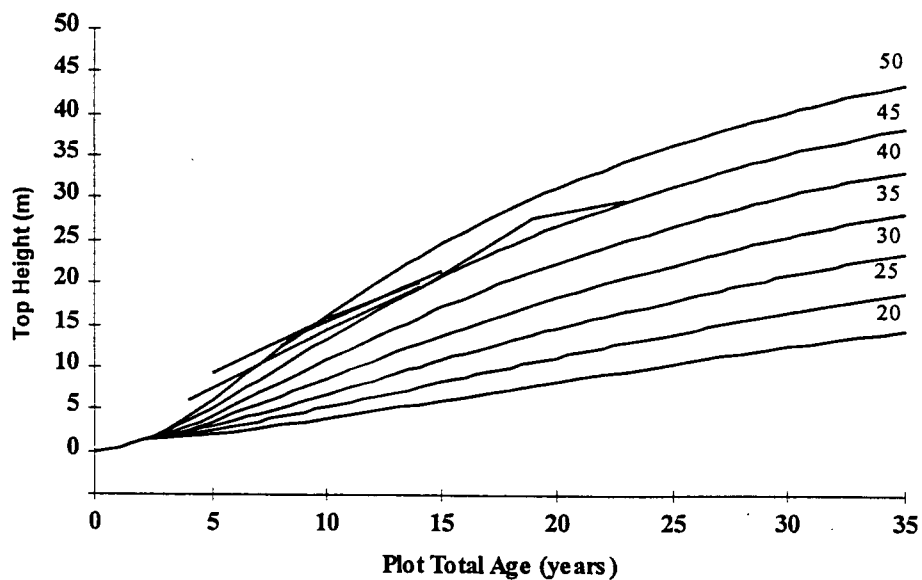
APPENDIX V
PERMANENT SAMPLE PLOT GROWTH TRAJECTORIES VS. PREDICTED
GROWTH

- A) REVISED PSP INFORMATION BASED ON AGE CORRECTIONS
- B) HT-AGE AND VOLUME-AGE TRAJECTORIES

REVISED PSP INFORMATION - AGE CORRECTIONS

[illegible]

Individual Tree Based Site Index Curves vs. PSP Based Height - Age
Trajectories
Thrower (1992) - Black Cottonwood Site Index Curves
Natural Cottonwood Stands
SPECIES: Cottonwood



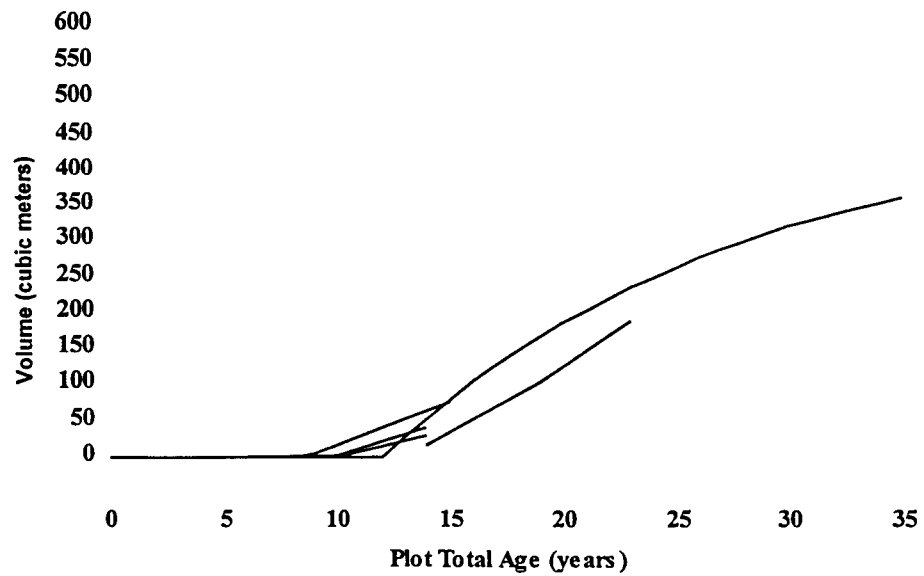
Individual Tree Based Site Index Curves vs. PSP Based Height - Age
Trajectories
Thrower (1992) - Black Cottonwood Site Index Curves
Short Rotation Intensive Culture Plantation
SPECIES: Cottonwood



VDYP Yield Curves vs. PSP Based Volume - Age Trajectories
 VDYP 1.0 (6.4a)-Site Index 45m-Stocking Class: 1
 Natural Cottonwood Stands
 C.U. LESS DECAY VOLUME - 12.5+ cm
 SPECIES: Cottonwood



VDYP Yield Curves vs. PSP Based Volume - Age Trajectories
 VDYP 1.0 (6.4a)-Site Index 45m-Stocking Class: 1
 Natural Cottonwood Stands
 C.U. LESS DECAY VOLUME - 17.5+ cm
 SPECIES: Cottonwood



VDYP Yield Curves vs. PSP Based Volume - Age Trajectories
VDYP 1.0 (6.4a)-Site Index 49m-Stocking Class: 1
Short Rotation Intensive Culture Plantations
C.U. LESS DECAY VOLUME - 12.5+ cm
SPECIES: Cottonwood

