

Run 9

This run is one of the standard runs required as per the Interim Forest Management Planning Manual. It is the even flow for the first rotation with the harvest level reduced to LRSYA for the second rotation.

Long-run sustained-yield average (LRSYA) is a measure of forest productivity that is calculated as the sum of growth per year of regenerated stands at a selected rotation age. It is derived from the theoretical concept of a regulated forest with static and uniform age class distribution, a single rotation age and a single yield function operating across equally productive sites. Under this assumption, the annual harvest equates the annual growth in the oldest age class. LRSYA is calculated using the following formula:

$$LRSYA = \sum_i MAI_i \cdot A_i$$

Where:

LRSYA = long-run sustained-yield average (m³/yr)

MAI_i = mean annual increment (m³/ha/yr) for yield class “i”

A_i = net area (ha) for yield class “i”.

TABLE 18.34: SUMMARY OF RUN 9 OBJECTIVES, CONSTRAINTS AND RESULTS.

Forest Management Strategy #	Landbase Strategy	Yield Curve Transition	Primary Species	Flow Constraint	Planning Horizon	Target Harvest Age	Minimum Harvest Age	Planned Blocks Sequenced	Adjacency	Adjacency Horizon	Green Up Period	Accum. Block Area (ha)	Conifer AAC	Deciduous AAC
9	Single	Status Quo with Conifer understory transition	Conifer	Even Flow	160	80	70-Conifer 50-Deciduous	Applied	Off	N/A	N/A	N/A	6,785 (20 yr Avg.) -6,400 ²²	4,037 (20yr Avg.)

²² LRSYA was calculated to be 6402 cubic meters per year for conifer and 4740 cubic meters per year for deciduous.

TABLE 18.35: RUN 9 – ANNUAL HARVEST FLOW SUMMARY

Period	Coniferous Volume	Deciduous Volume
5	6756	1711
10	6715	7464
15	6862	1672
20	6805	5299
25	6703	5285
30	6749	1808
35	6741	1947
40	6733	1648
45	6745	6421
50	6746	8734
55	6788	4583
60	6735	5478
65	6778	10360
70	6760	4218
75	6782	2218
80	6879	4923
85	6478	2323
90	6400	4013
95	6652	2269
100	6401	2373
105	6450	3635
110	6490	5045
115	6491	1884
120	6402	2179
125	6430	1714
130	6401	6487
135	6406	6784
140	6412	3836
145	6436	7070
150	6442	7453
155	6412	3950
160	6492	1987
20 year average	6785	4037
160 year average	6608	4274

FIGURE 18.25: RUN 9 – ANNUAL HARVEST FLOW SUMMARY

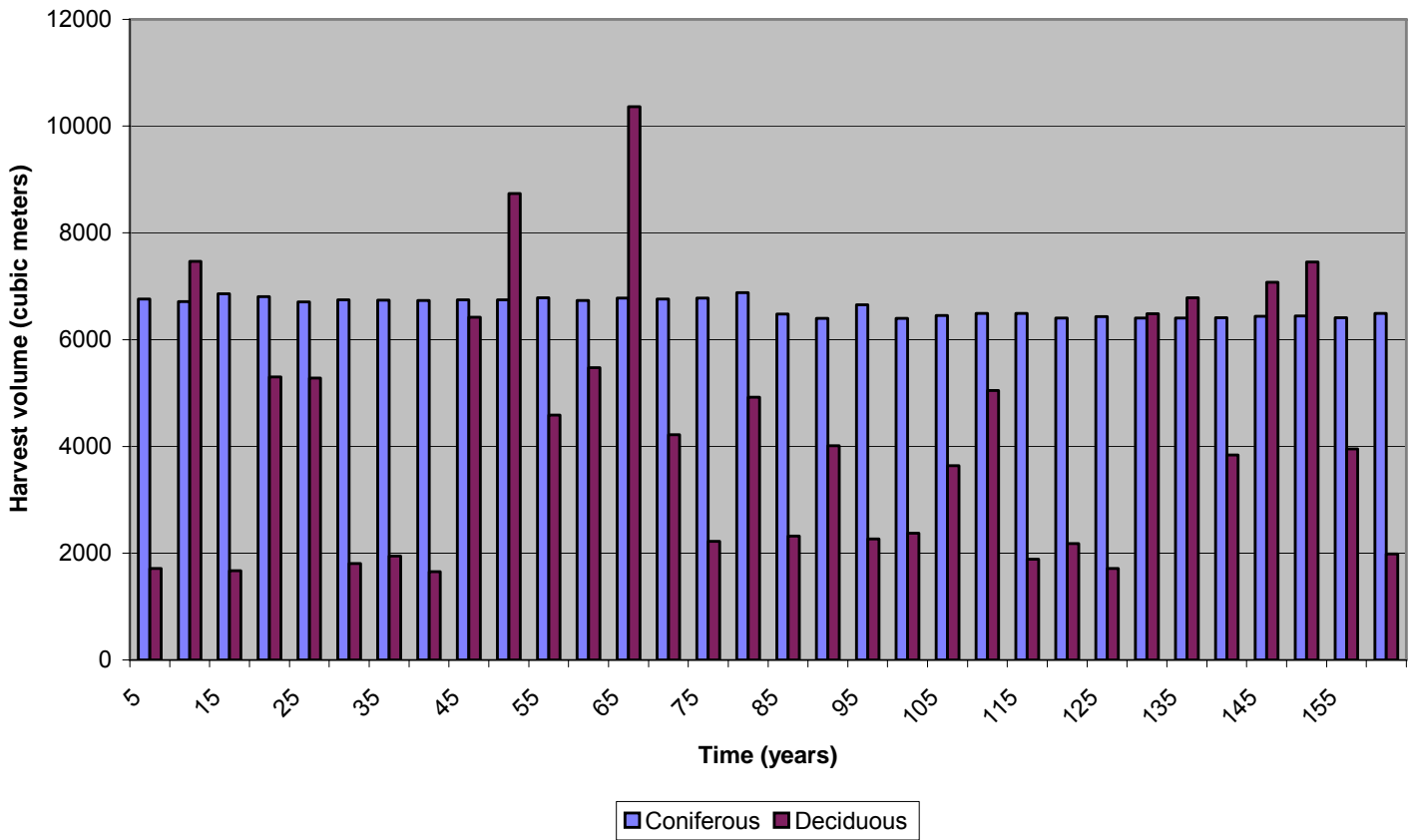


TABLE 18.36: RUN 9 – AVERAGE HARVEST AGE SUMMARY

Period	Average Harvest Age
5	112
10	87
15	120
20	95
25	147
30	139
35	128
40	128
45	133
50	131
55	128
60	128
65	133
70	128
75	85
80	78
85	79
90	83
95	83
100	83
105	85
110	86
115	85
120	86
125	85
130	86
135	87
140	87
145	86
150	87
155	86
160	87

FIGURE 18.26: RUN 9 – AVERAGE HARVEST AGE SUMMARY

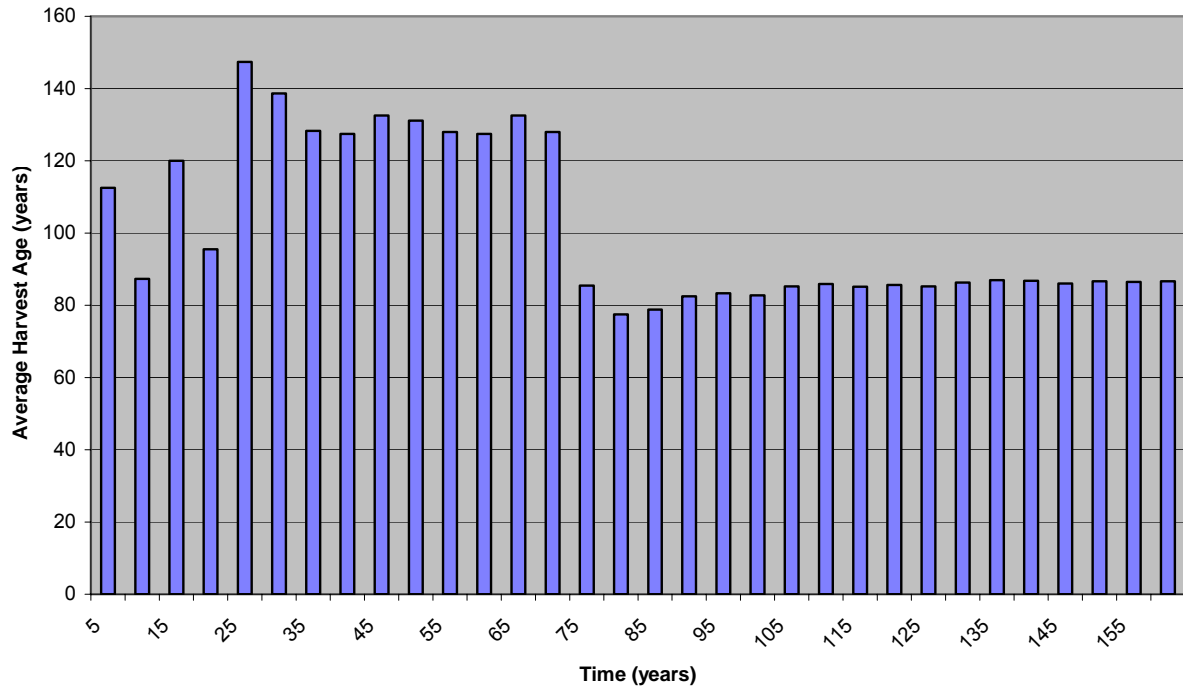
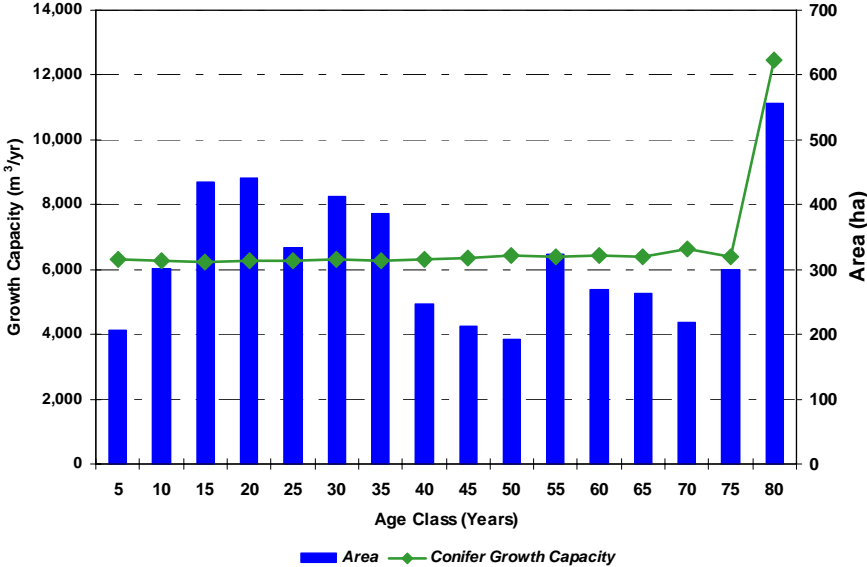


TABLE 18.37: RUN 9 – GROWTH CAPACITY AT 160 YEARS.

Age	Area (ha)	Growth Capacity Total	Annual Growth Capacity
5	206.2	31595.5	6319.1
10	301.7	31452.6	6290.52
15	435.1	31128.4	6225.68
20	441.2	31328.3	6265.66
25	333.9	31357.3	6271.46
30	413.4	31519	6303.8
35	387.1	31392.9	6278.58
40	246.2	31560.6	6312.12
45	211.8	31783.7	6356.74
50	192.8	32133.3	6426.66
55	323.5	31959.1	6391.82
60	269	32192.2	6438.44
65	262.4	31972.7	6394.54
70	219.2	33150.3	6630.06
75	299.3	32000.6	6400.12
80	556.2	62279	12455.8
Total	5099	538805.5	107761.1

FIGURE 18.27: RUN 9 – POST HARVEST FOREST CONDITIONS¹ AT 160 YEARS IN FUTURE.



¹ Projected structure of the net landbase after 160 years. The age class distribution (bars) and harvest age volume (growth capacity – line symbol) associated with each age class are presented.