

## KAHO

## Rate Results (ft/yr)

Transect #	S-T(WLS)	ST CI95	EX	EX CI95	EXT	EXT CI95
0	0.074438	0.599131	0.004941	0.037613	-0.33063	0.122689
1	-0.38654	0.6634	-0.45777	0.140638	0.673971	0.458739
2	-0.70491	0.788935	-0.77321	0.168295	0.952853	0.548951
3	-0.43291	0.98636	-0.51282	0.227498	1.101909	0.742059
4	-0.8226	0.637993	-0.84764	0.144552	0.911965	0.471503
6	-1.32389	0.476384	-1.36094	0.102522	-2.00122	0.334408
7	-1.1702	0.438208	-1.15785	0.113332	-2.71919	0.369669
8	-0.64451	0.431627	-0.71461	0.08417	-1.53098	0.274547
10	0.226697	0.54023	0.251337	0.117406	2.226672	0.382959
11	0.196054	0.259089	0.22138	0.042859	0.941111	0.139798
12	-0.10635	0.394851	-0.04452	0.04311	0.944932	0.140618
13	-0.4305	0.214627	-0.39455	0.032184	-0.03523	0.104978
14	-0.48229	0.230147	-0.47736	0.033933	-0.01534	0.110684
15	-0.82976	0.314726	-0.86415	0.074789	-1.20173	0.243948
16	-1.18058	0.215367	-1.15036	0.078299	-0.4834	0.255397
17	-1.16441	0.205542	-1.09853	0.074323	-0.52329	0.24243
18	-0.91429	0.283286	-0.84493	0.064459	0.169991	0.210254
19	-0.95616	0.177238	-0.90962	0.062584	-0.86863	0.204137
20	-0.83007	0.164289	-0.81439	0.054424	-0.46334	0.177522
21	-0.91965	0.306057	-0.82281	0.059372	-0.37541	0.193663
22	-0.87499	0.254053	-0.82136	0.06076	-0.27776	0.198189
23	-0.9423	0.305581	-0.89852	0.06698	0.026344	0.218476
24	-1.06606	0.40673	-1.02971	0.088589	0.510833	0.288961
26	-1.08462	0.73801	-1.11051	0.121078	1.479306	0.394937
27	-1.03513	0.403308	-1.01948	0.076675	0.216203	0.250101
28	-1.21575	0.524222	-1.21035	0.090708	0.225662	0.295875
29	-1.41191	0.667049	-1.41675	0.108306	0.307298	0.353275
30	-1.58467	0.665372	-1.59373	0.130334	0.820628	0.425127
31	-0.78037	0.191805	-0.75336	0.051364	-0.33962	0.16754
32	-0.40428	0.124621	-0.41737	0.035481	-0.48808	0.115734
33	-0.43125	0.236859	-0.4694	0.035992	-0.10579	0.117398
34	-0.3936	0.349607	-0.45775	0.04419	0.012352	0.14414
35	-0.37597	0.366035	-0.42741	0.050053	0.19367	0.163265
36	-0.32475	0.350924	-0.37044	0.06002	0.448235	0.195775
37	-0.34308	0.340267	-0.37018	0.060498	0.426217	0.197334
38	-0.30908	0.350989	-0.3395	0.053894	0.606079	0.175793
39	-0.20602	0.387471	-0.24412	0.056988	0.88914	0.185885
40	-0.165	0.344435	-0.18598	0.055183	0.822986	0.179998
41	-0.16593	0.321645	-0.18928	0.05012	0.827583	0.163483
43	-0.23344	0.35145	-0.27006	0.050805	0.864894	0.165718
44	-0.17774	0.288775	-0.20491	0.034725	0.50747	0.113267
45	-0.38758	0.270334	-0.38191	0.036782	0.399301	0.119976
46	-0.49806	0.30964	-0.4883	0.044971	0.429364	0.146686
47	-0.52393	0.339242	-0.52449	0.050405	0.397406	0.164412
48	-0.42613	0.32338	-0.42133	0.049633	0.57894	0.161893
49	-0.41655	0.281442	-0.38337	0.036406	0.225162	0.118751
50	-0.45032	0.261582	-0.40344	0.030218	-0.01564	0.098567
51	-0.42296	0.288091	-0.36199	0.03158	-0.3225	0.103008
52	-0.32789	0.246505	-0.2882	0.044451	-0.69923	0.144991
53	-0.24356	0.441926	-0.16603	0.05655	-1.43551	0.184456
54	-0.72609	1.269362	-0.65023	0.227844	-4.70726	0.743188

55	-3.59072	0.4316	-3.56037	0.240672	-2.77541	0.785031
56	-2.89668	0.444726	-2.91572	0.211291	-2.74675	0.689194
57	-2.81277	0.779588	-2.92158	0.242197	-4.93301	0.790005
58	-2.82362	0.62417	-2.8021	0.244632	-5.27832	0.797946
59	-2.36316	0.352115	-2.25717	0.172077	-3.38909	0.561285
60	-1.21545	0.292914	-1.15911	0.079706	-1.03604	0.259986
61	-0.40218	0.520806	-0.42665	0.045251	-0.42591	0.147601
62	-0.42806	0.537545	-0.43497	0.04546	-0.3788	0.148284
63	-1.05992	0.724978	-1.01091	0.082464	-0.53929	0.268982
66	0	0	0.075128	0.062899	0.075128	0.062899
67	0	0	-0.02491	0.100701	-0.02491	0.100701
68	0	0	0.020682	0.077301	0.020682	0.077301
69	0	0	0.051477	0.054326	0.051477	0.054326
70	0	0	0.004079	0.062646	0.004079	0.062646
71	0	0	0.066398	0.117279	0.066398	0.117279
72	0	0	0.151385	0.106764	0.151385	0.106764
73	0	0	0.040857	0.031137	0.040857	0.031137
74	0	0	-0.04895	0.100836	-0.04895	0.100836
75	0	0	-0.40896	0.230706	-0.40896	0.230706
76	0	0	-0.45654	0.259084	-0.45654	0.259084
77	0	0	-0.20288	0.160933	-0.20288	0.160933
78	0	0	-0.05076	0.106802	-0.05076	0.106802
79	0	0	-0.06235	0.135619	-0.06235	0.135619
80	0	0	0.042722	0.131041	0.042722	0.131041
81	0	0	0.007165	0.159796	0.007165	0.159796
82	0	0	-0.01939	0.06449	-0.01939	0.06449
83	0	0	-0.09941	0.144143	-0.09941	0.144143
84	0	0	-0.13971	0.165957	-0.09768	1.490655
85	0	0	-0.16897	0.200722	-0.63793	0.972898
86	0	0	-0.15982	0.189848	-0.48645	1.329217
87	0	0	-0.13395	0.159116	-0.57532	1.321541
89	0	0	-0.99791	0.361919	-0.99791	0.361919
90	0	0	-0.74698	0.25381	-0.74698	0.25381
91	0	0	-0.00719	0.067043	-0.00719	0.067043
92	0	0	-0.07528	0.133758	-0.07528	0.133758
93	0	0	0.199201	0.255185	0.199201	0.255185
94	0	0	0.078147	0.06338	0.078147	0.06338
95	0	0	0.344491	0.199578	0.344491	0.199578
97	0	0	0.195549	0.08127	0.195549	0.08127
98	0	0	0.174871	0.066061	0.174871	0.066061
99	0	0	0.239059	0.098576	0.239059	0.098576
100	0	0	0.220924	0.083411	0.220924	0.083411
101	0	0	0.34956	0.120258	0.34956	0.120258
102	0	0	0.279968	0.104123	0.279968	0.104123
103	0	0	-0.22058	0.074678	-0.22058	0.074678
104	0	0	0.006455	0.069772	0.006455	0.069772
105	0	0	0.076331	0.081527	0.076331	0.081527
106	0	0	0.047725	0.082896	0.047725	0.082896
107	0	0	0.169659	0.127837	0.169659	0.127837
108	0	0	0.221945	0.123094	0.221945	0.123094
109	0	0	0.133713	0.061685	0.133713	0.061685
110	0	0	0.243412	0.09771	0.243412	0.09771
111	0	0	0.216351	0.090784	0.216351	0.090784
112	0	0	0.285242	0.126809	0.285242	0.126809

113	0	0	0.190414	0.125934	0.190414	0.125934
114	0	0	-0.08044	0.02509	-0.08044	0.02509
115	0	0	-0.13668	0.088936	-0.13668	0.088936

KAHO  
 50 yr Hazard Results (ft)  
 Hazard Distance from Baseline  
 BUFFER = 0 ft

Transect #	S-T(WLS)	ST CI95	EX	EX CI95	EXT	EXT CI95
0	79.50538	50.51451	85.04551	14.59263	119.4078	18.91828
1	157.8586	55.38375	163.5368	18.15621	47.64707	48.53965
2	204.2793	65.00742	209.7237	19.5945	32.97542	57.32161
3	199.5538	80.33224	205.9239	23.08356	40.57608	76.38945
4	233.8098	53.45319	235.8065	18.35047	55.62342	49.77474
6	204.2394	41.38569	207.1929	16.45442	272.7566	36.70982
7	191.7255	38.61203	190.7408	16.899	350.6215	40.01875
8	122.4391	38.1381	128.0278	15.77895	211.6233	31.22205
10	172.1123	46.10041	170.148	17.07486	-32.1256	41.27707
11	172.6687	26.4041	170.6498	14.68424	96.94958	20.09547
12	194.9342	35.51561	190.0054	14.68892	88.68616	20.15393
13	209.5599	23.73453	206.6945	14.50987	169.9001	17.79512
14	217.1737	24.6413	216.7803	14.53518	169.4699	18.14524
15	252.5673	30.00093	255.3087	15.47576	289.8768	28.50553
16	273.8925	23.77708	271.4838	15.58569	203.1877	29.51327
17	270.4158	23.21789	265.1642	15.4615	206.2601	28.37278
18	252.2721	27.93881	246.7433	15.17755	142.8156	25.61357
19	253.8445	21.68453	250.1345	15.12759	245.9372	25.10242
20	229.5378	21.02657	228.2875	14.92571	192.3401	22.94011
21	235.6247	29.42543	227.9054	15.04511	182.0915	24.23881
22	209.7292	26.09126	205.4545	15.08028	149.7896	24.6101
23	219.5553	29.39403	216.0656	15.24676	121.3598	26.30787
24	222.1813	36.35753	219.2836	15.93193	61.533	32.52509
26	243.8504	61.0886	245.9139	17.23705	-19.2821	42.41559
27	253.7894	36.11449	252.5421	15.53431	126.0086	29.04573
28	274.0152	44.91058	273.5847	16.00755	126.5379	33.15471
29	289.0155	55.66157	289.4012	16.68824	112.8598	38.47463
30	286.4266	55.53391	287.1491	17.66079	39.91959	45.30206
31	226.226	22.45846	224.073	14.85664	181.7061	22.15906
32	194.738	19.21682	195.7818	14.55865	203.0227	18.46465
33	202.5367	25.04224	205.5777	14.56661	168.3443	18.5718
34	197.6084	32.36226	202.7223	14.7093	154.5843	20.40682
35	199.1379	33.49669	203.2381	14.82818	139.6402	21.83029
36	283.0795	32.45271	286.7222	15.06143	202.8898	24.41173
37	305.1846	31.72333	307.3449	15.07358	225.7943	24.5398
38	308.7385	32.45718	311.163	14.91349	214.3364	22.80356
39	302.4179	34.99531	305.4555	14.9864	189.4101	23.60784
40	296.272	32.00786	297.9445	14.94342	194.627	23.13661
41	290.9968	30.46371	292.8584	14.82962	188.7321	21.84696
43	336.1204	32.48888	339.0395	14.84442	222.8207	22.01847
44	322.6118	28.29362	324.7782	14.54706	251.8306	18.30756
45	325.6795	27.11105	325.2276	14.57915	245.2314	18.73949
46	312.0125	29.66269	311.2347	14.72433	217.2658	20.59151
47	291.9162	31.65343	291.9612	14.83575	197.5593	21.91818
48	291.2994	30.58022	290.9166	14.8192	188.4891	21.72558
49	297.5187	27.82009	294.8731	14.57316	232.5599	18.65957
50	305.5971	26.55981	301.8595	14.48299	262.1487	17.41612
51	308.6615	28.24928	303.8012	14.50143	299.7566	17.67694
52	299.511	25.627	296.3468	14.71429	338.4367	20.46834

53	280.7733	38.88038	274.5928	14.97585	404.587	23.49292
54	274.0633	102.5184	268.0155	23.10524	683.454	76.50161
55	436.9863	38.13611	434.5669	23.91748	354.1873	80.66257
56	391.0525	39.08276	392.5699	22.08298	375.2676	71.14462
57	389.0388	64.28684	397.7127	24.01512	603.6824	81.15774
58	402.715	52.40577	400.9993	24.17142	654.5633	81.94838
59	393.2783	32.53457	384.8296	19.80211	500.7377	58.53044
60	329.8595	28.56271	325.3685	15.63094	312.7662	29.92017
61	284.0727	44.65729	286.0236	14.72978	285.9478	20.65823
62	308.2082	45.90052	308.7586	14.73388	303.0075	20.70821
63	401.5416	60.08878	397.6344	15.72159	349.3411	30.72267
66	271.2712	24.58911	265.2431	15.21694	265.2431	15.21694
67	294.1522	41.01249	296.1509	16.47336	296.1509	16.47336
68	308.8949	28.81481	307.2354	15.63827	307.2354	15.63827
69	303.1818	34.06961	299.0515	15.00286	299.0515	15.00286
70	302.7633	27.69688	302.436	15.21024	302.436	15.21024
71	310.5333	39.72761	305.2057	17.16495	305.2057	17.16495
72	291.099	32.93536	278.9522	16.71732	278.9522	16.71732
73	285.4389	23.92529	282.1607	14.57143	282.1607	14.57143
74	294.7508	35.54797	298.6787	16.47867	298.6787	16.47867
75	303.096	52.43783	335.9097	23.42543	335.9097	23.42543
76	316.741	67.79479	353.3723	25.26334	353.3723	25.26334
77	354.1494	30.68848	370.4282	19.30869	370.4282	19.30869
78	363.7916	40.88681	367.8641	16.7189	367.8641	16.7189
79	395.5812	45.62501	400.5839	18.01379	400.5839	18.01379
80	396.9478	44.03496	393.5199	17.79432	393.5199	17.79432
81	389.8054	50.44176	389.2305	19.24783	389.2305	19.24783
82	381.1888	29.06631	382.7449	15.25977	382.7449	15.25977
83	383.9623	40.2392	391.9391	18.43499	391.9391	18.43499
84	383.6676	51.45074	395.2429	20.14373	397.4437	150.8109
85	368.6168	36.88902	382.6169	22.20985	427.8799	99.06999
86	342.3763	38.30662	355.618	21.54353	386.8183	134.646
87	316.3875	38.04649	327.4857	19.76115	371.058	133.8778
89	85.95208	94.01143	169.9958	33.69639	169.9958	33.69639
90	132.6228	77.85296	195.5329	25.75467	195.5329	25.75467
91	149.3047	43.61885	149.9106	15.43565	149.9106	15.43565
92	156.0291	65.04152	162.3693	18.25593	162.3693	18.25593
93	151.8133	114.0419	135.0367	25.85081	135.0367	25.85081
94	150.6179	38.96244	144.0365	15.32551	144.0365	15.32551
95	117.4007	95.28524	88.38783	22.11108	88.38783	22.11108
97	110.3106	42.00383	93.84148	15.91308	93.84148	15.91308
98	108.3907	32.11156	93.66307	15.40558	93.66307	15.40558
99	100.8788	39.58779	80.74535	16.59224	80.74535	16.59224
100	100.4383	38.30811	81.83219	15.99147	81.83219	15.99147
101	87.44397	41.6272	58.00416	17.57717	58.00416	17.57717
102	57.08362	47.15993	33.50481	16.83085	33.50481	16.83085
103	43.86393	27.94749	62.44127	15.6823	62.44127	15.6823
104	73.08309	36.21867	72.53942	15.52119	72.53942	15.52119
105	66.57179	41.28949	60.14327	15.9224	60.14327	15.9224
106	71.41667	51.42618	67.39726	15.97244	67.39726	15.97244
107	120.039	54.53033	105.7504	17.95253	105.7504	17.95253
108	139.0101	51.15708	120.318	17.71586	120.318	17.71586
109	145.4097	33.49227	134.1484	15.27635	134.1484	15.27635
110	133.9979	38.91143	113.4979	16.55584	113.4979	16.55584

111	131.9264	43.47342	113.7054	16.27381	113.7054	16.27381
112	106.5905	74.79759	82.56762	17.90073	82.56762	17.90073
113	92.46229	68.01174	76.42568	17.85687	76.42568	17.85687
114	124.6548	80.16869	131.4295	14.52044	131.4295	14.52044
115	144.3349	47.8226	155.8457	16.20125	155.8457	16.20125

KAHO  
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Method	1	2	3	4
S-T(WLS)	3.131521	2.741952	2.56463	3.495762
EX	2.348902	2.192369	2.282987	2.490779
EXT	2.042374	2.192369	3.110894	2.490779

KAHO  
Parameters

Number of Rate Parameters

	1	2	3	4
S-T(WLS)	1	0	0	0
EX	3	2	1	2
EXT	3	2	3	2

Number of Acceleration Parameters

	1	2	3	4
E	3	0	3	0

Group #    START tra | STOP transect

1	0	63
2	66	83
3	84	87
4	89	115



KAHO  
ST Original Values

Transect #	ST RATE	ST RATE C	ST HAZAR	ST HAZARD	CI95
0	0.074438	0.599131	79.50538	50.51451	
1	-0.38654	0.6634	157.8586	55.38375	
2	-0.70491	0.788935	204.2793	65.00742	
3	-0.43291	0.98636	199.5538	80.33224	
4	-0.8226	0.637993	233.8098	53.45319	
6	-1.32389	0.476384	204.2394	41.38569	
7	-1.1702	0.438208	191.7255	38.61203	
8	-0.64451	0.431627	122.4391	38.1381	
10	0.226697	0.54023	172.1123	46.10041	
11	0.196054	0.259089	172.6687	26.4041	
12	-0.10635	0.394851	194.9342	35.51561	
13	-0.4305	0.214627	209.5599	23.73453	
14	-0.48229	0.230147	217.1737	24.6413	
15	-0.82976	0.314726	252.5673	30.00093	
16	-1.18058	0.215367	273.8925	23.77708	
17	-1.16441	0.205542	270.4158	23.21789	
18	-0.91429	0.283286	252.2721	27.93881	
19	-0.95616	0.177238	253.8445	21.68453	
20	-0.83007	0.164289	229.5378	21.02657	
21	-0.91965	0.306057	235.6247	29.42543	
22	-0.87499	0.254053	209.7292	26.09126	
23	-0.9423	0.305581	219.5553	29.39403	
24	-1.06606	0.40673	222.1813	36.35753	
26	-1.08462	0.73801	243.8504	61.0886	
27	-1.03513	0.403308	253.7894	36.11449	
28	-1.21575	0.524222	274.0152	44.91058	
29	-1.41191	0.667049	289.0155	55.66157	
30	-1.58467	0.665372	286.4266	55.53391	
31	-0.78037	0.191805	226.226	22.45846	
32	-0.40428	0.124621	194.738	19.21682	
33	-0.43125	0.236859	202.5367	25.04224	
34	-0.3936	0.349607	197.6084	32.36226	
35	-0.37597	0.366035	199.1379	33.49669	
36	-0.32475	0.350924	283.0795	32.45271	
37	-0.34308	0.340267	305.1846	31.72333	
38	-0.30908	0.350989	308.7385	32.45718	
39	-0.20602	0.387471	302.4179	34.99531	
40	-0.165	0.344435	296.272	32.00786	
41	-0.16593	0.321645	290.9968	30.46371	
43	-0.23344	0.35145	336.1204	32.48888	
44	-0.17774	0.288775	322.6118	28.29362	
45	-0.38758	0.270334	325.6795	27.11105	
46	-0.49806	0.30964	312.0125	29.66269	
47	-0.52393	0.339242	291.9162	31.65343	
48	-0.42613	0.32338	291.2994	30.58022	
49	-0.41655	0.281442	297.5187	27.82009	
50	-0.45032	0.261582	305.5971	26.55981	
51	-0.42296	0.288091	308.6615	28.24928	
52	-0.32789	0.246505	299.511	25.627	
53	-0.24356	0.441926	280.7733	38.88038	
54	-0.72609	1.269362	274.0633	102.5184	

55	-3.59072	0.4316	436.9863	38.13611
56	-2.89668	0.444726	391.0525	39.08276
57	-2.81277	0.779588	389.0388	64.28684
58	-2.82362	0.62417	402.715	52.40577
59	-2.36316	0.352115	393.2783	32.53457
60	-1.21545	0.292914	329.8595	28.56271
61	-0.40218	0.520806	284.0727	44.65729
62	-0.42806	0.537545	308.2082	45.90052
63	-1.05992	0.724978	401.5416	60.08878
66	0.205154	0.224141	254.8102	24.58911
67	-0.01335	0.466463	295.2233	41.01249
68	-0.03303	0.292047	311.5453	28.81481
69	0.100727	0.369619	295.0998	34.06961
70	-0.07605	0.274733	308.8655	27.69688
71	0.110439	0.448859	301.6719	39.72761
72	0.278365	0.353289	268.7637	32.93536
73	0.238429	0.212689	266.3079	23.92529
74	0.071307	0.390646	289.0293	35.54797
75	-0.36671	0.619218	332.52	52.43783
76	-0.28841	0.818674	339.8826	67.79479
77	-0.52348	0.320326	396.1518	30.68848
78	-0.218	0.464746	381.2836	40.88681
79	-0.00399	0.528828	395.9015	45.62501
80	0.150164	0.50746	384.899	44.03496
81	0.190483	0.592903	374.5216	50.44176
82	0.081942	0.295893	374.614	29.06631
83	-0.08365	0.455882	390.6742	40.2392
84	0.204467	0.585276	366.7267	51.45074
85	-0.29424	0.393904	392.9955	36.88902
86	-0.26854	0.413144	364.6258	38.30662
87	-0.2052	0.409628	333.3887	38.04649
89	-1.02724	1.093978	172.4654	94.01143
90	-0.63664	0.897364	186.2407	77.85296
91	0.068957	0.467951	143.4972	43.61885
92	-0.0069	0.739705	156.6104	65.04152
93	0.177442	1.335789	136.8692	114.0419
94	0.156392	0.405912	137.4467	38.96244
95	0.436336	1.109407	80.65267	95.28524
97	0.218297	0.446634	91.9257	42.00383
98	0.126988	0.310026	97.69575	32.11156
99	0.261942	0.414355	78.81822	39.58779
100	0.202672	0.397034	83.36935	38.30811
101	0.32867	0.441635	59.7635	41.6272
102	0.236819	0.5141	37.13884	47.15993
103	-0.24214	0.246692	64.25644	27.94749
104	-0.01715	0.36835	74.52737	36.21867
105	-0.0045	0.437142	66.95037	41.28949
106	-0.00758	0.568855	72.055	51.42618
107	0.158657	0.608249	106.6769	54.53033
108	0.185329	0.565424	123.4018	51.15708
109	0.089323	0.329979	137.8869	33.49227
110	0.235099	0.405221	114.198	38.91143
111	0.140997	0.466039	120.0517	43.47342
112	0.183015	0.859946	91.17706	74.79759

113	0.166118	0.776453	78.47194	68.01174
114	-0.47306	0.925664	164.4955	80.16869
115	-0.26317	0.522659	166.4993	47.8226