

APPENDIX 1. SCENARIOS AND INPUTS

Table A1.1. Summary of scenarios evaluated. Prioritization Metric: Scenarios 1-64 used the Core Area Zonation (species representation) algorithm; scenarios 65-128 used the Additive Benefit Function (species diversity) algorithm. Geographic stratification: 0 = combined conservation priorities; 1 = separate conservation priorities by BCR subregion (based on separate priority species lists for each BCR subregion). Uncertainty: 0 = current distribution only, no uncertainty; 1 = current distribution, with uncertainty; 2 = current and future (2050s) distributions, with uncertainty; 3 = future distribution (2050s), with uncertainty. Disturbance: 0 = none; 1 = discounted by footprint proportion. Ecological Association: 0 = all priority landbird species, 1 = forest-associated species. Conservation Status: 0 = all equal; 1 = conservation status ranking.

#	Prioritization Metric	Geographic Stratification	Uncertainty	Disturbance	Ecological Association	Conservation Status	Name
1	0	0	0	0	0	0	Representation
2	0	0	0	1	0	0	Representation + Disturbance
3	0	1	0	0	0	0	Representation + BCR Strata
4	0	1	0	1	0	0	Representation + BCR Strata + Disturbance
5	0	0	0	0	1	0	Representation + Forest Birds
6	0	0	0	1	1	0	Representation + Disturbance + Forest Birds
7	0	1	0	0	1	0	Representation + BCR Strata + Forest Birds
8	0	1	0	1	1	0	Representation + BCR Strata + Disturbance + Forest Birds
9	0	0	0	0	0	1	Representation + Conservation Status
10	0	0	0	1	0	1	Representation + Disturbance + Conservation Status
11	0	1	0	0	0	1	Representation + BCR Strata + Conservation Status
12	0	1	0	1	0	1	Representation + BCR Strata + Disturbance + Conservation Status
13	0	0	0	0	1	1	Representation + Forest Birds + Conservation Status
14	0	0	0	1	1	1	Representation + Disturbance + Forest Birds + Conservation Status
15	0	1	0	0	1	1	Representation + BCR Strata + Forest Birds + Conservation Status
16	0	1	0	1	1	1	Representation + BCR Strata + Disturbance + Forest Birds + Conservation Status
17	0	0	1	0	0	0	Representation + Current Uncertainty
18	0	0	1	1	0	0	Representation + Current Uncertainty + Disturbance
19	0	1	1	0	0	0	Representation + Current Uncertainty + BCR Strata
20	0	1	1	1	0	0	Representation + Current Uncertainty + BCR Strata + Disturbance
21	0	0	1	0	1	0	Representation + Current Uncertainty + Forest Birds
22	0	0	1	1	1	0	Representation + Current Uncertainty + Disturbance + Forest Birds

#	Prioritization Metric	Geographic Stratification	Uncertainty	Disturbance	Ecological Association	Conservation Status	Conservation Name
23	0	1	1	0	1	0	Representation + Current Uncertainty + BCR Strata + Forest Birds
24	0	1	1	1	1	0	Representation + Current Uncertainty + BCR Strata + Disturbance + Forest Birds
25	0	0	1	0	0	1	Representation + Current Uncertainty + Conservation Status
26	0	0	1	1	0	1	Representation + Current Uncertainty + Disturbance + Conservation Status
27	0	1	1	0	0	1	Representation + Current Uncertainty + BCR Strata + Conservation Status
28	0	1	1	1	0	1	Representation + Current Uncertainty + BCR Strata + Disturbance + Conservation Status
29	0	0	1	0	1	1	Representation + Current Uncertainty + Forest Birds + Conservation Status
30	0	0	1	1	1	1	Representation + Current Uncertainty + Disturbance + Forest Birds + Conservation Status
31	0	1	1	0	1	1	Representation + Current Uncertainty + BCR Strata + Forest Birds + Conservation Status
32	0	1	1	1	1	1	Representation + Current Uncertainty + BCR Strata + Disturbance + Forest Birds + Conservation Status
33	0	0	2	0	0	0	Representation + Current/Future Uncertainty
34	0	0	2	1	0	0	Representation + Current/Future Uncertainty + Disturbance
35	0	1	2	0	0	0	Representation + Current/Future Uncertainty + BCR Strata
36	0	1	2	1	0	0	Representation + Current/Future Uncertainty + BCR Strata + Disturbance
37	0	0	2	0	1	0	Representation + Current/Future Uncertainty + Forest Birds
38	0	0	2	1	1	0	Representation + Current/Future Uncertainty + Disturbance + Forest Birds
39	0	1	2	0	1	0	Representation + Current/Future Uncertainty + BCR Strata + Forest Birds
40	0	1	2	1	1	0	Representation + Current/Future Uncertainty + BCR Strata + Disturbance + Forest Birds
41	0	0	2	0	0	1	Representation + Current/Future Uncertainty + Conservation Status
42	0	0	2	1	0	1	Representation + Current/Future Uncertainty + Disturbance

#	Prioritization Metric	Geographic Stratification	Uncertainty	Disturbance	Ecological Association	Conservation Status	Conservation Name
43	0	1	2	0	0	1	+ Conservation Status Representation + Current/Future Uncertainty + BCR Strata + Conservation Status
44	0	1	2	1	0	1	Representation + Current/Future Uncertainty + BCR Strata + Disturbance + Conservation Status
45	0	0	2	0	1	1	Representation + Current/Future Uncertainty + Forest Birds + Conservation Status
46	0	0	2	1	1	1	Representation + Current/Future Uncertainty + Disturbance + Forest Birds + Conservation Status
47	0	1	2	0	1	1	Representation + Current/Future Uncertainty + BCR Strata + Forest Birds + Conservation Status
48	0	1	2	1	1	1	Representation + Current/Future Uncertainty + BCR Strata + Disturbance + Forest Birds + Conservation Status
49	0	0	3	0	0	0	Representation + Future Uncertainty
50	0	0	3	1	0	0	Representation + Future Uncertainty + Disturbance
51	0	1	3	0	0	0	Representation + Future Uncertainty + BCR Strata
52	0	1	3	1	0	0	Representation + Future Uncertainty + BCR Strata + Disturbance
53	0	0	3	0	1	0	Representation + Future Uncertainty + Forest Birds
54	0	0	3	1	1	0	Representation + Future Uncertainty + Disturbance + Forest Birds
55	0	1	3	0	1	0	Representation + Future Uncertainty + BCR Strata + Forest Birds
56	0	1	3	1	1	0	Representation + Future Uncertainty + BCR Strata + Disturbance + Forest Birds
57	0	0	3	0	0	1	Representation + Future Uncertainty + Conservation Status
58	0	0	3	1	0	1	Representation + Future Uncertainty + Disturbance + Conservation Status
59	0	1	3	0	0	1	Representation + Future Uncertainty + BCR Strata + Conservation Status
60	0	1	3	1	0	1	Representation + Future Uncertainty + BCR Strata + Disturbance + Conservation Status
61	0	0	3	0	1	1	Representation + Future Uncertainty + Forest Birds + Conservation Status
62	0	0	3	1	1	1	Representation + Future Uncertainty + Disturbance + Forest

#	Prioritization Metric	Geographic Stratification	Uncertainty	Disturbance	Ecological Association	Conservation Status	Conservation Name
63	0	1	3	0	1	1	Birds + Conservation Status Representation + Future Uncertainty + BCR Strata + Forest Birds + Conservation Status
64	0	1	3	1	1	1	Representation + Future Uncertainty + BCR Strata + Disturbance + Forest Birds + Conservation Status
65	0	0	0	0	0	0	Diversity
66	0	0	0	1	0	0	Diversity + Disturbance
67	0	1	0	0	0	0	Diversity + BCR Strata
68	0	1	0	1	0	0	Diversity + BCR Strata + Disturbance
69	0	0	0	0	1	0	Diversity + Forest Birds
70	0	0	0	1	1	0	Diversity + Disturbance + Forest Birds
71	0	1	0	0	1	0	Diversity + BCR Strata + Forest Birds
72	0	1	0	1	1	0	Diversity + BCR Strata + Disturbance + Forest Birds
73	0	0	0	0	0	1	Diversity + Conservation Status
74	0	0	0	1	0	1	Diversity + Disturbance + Conservation Status
75	0	1	0	0	0	1	Diversity + BCR Strata + Conservation Status
76	0	1	0	1	0	1	Diversity + BCR Strata + Disturbance + Conservation Status
77	0	0	0	0	1	1	Forest Birds + Conservation Status
78	0	0	0	1	1	1	Disturbance + Forest Birds + Conservation Status
79	0	1	0	0	1	1	BCR Strata + Forest Birds + Conservation Status
80	0	1	0	1	1	1	BCR Strata + Disturbance + Forest Birds + Conservation Status
81	0	0	1	0	0	0	Diversity + Current Uncertainty
82	0	0	1	1	0	0	Diversity + Current Uncertainty + Disturbance
83	0	1	1	0	0	0	Diversity + Current Uncertainty + BCR Strata
84	0	1	1	1	0	0	Diversity + Current Uncertainty + BCR Strata + Disturbance
85	0	0	1	0	1	0	Diversity + Current Uncertainty + Forest Birds
86	0	0	1	1	1	0	Diversity + Current Uncertainty + Disturbance + Forest Birds
87	0	1	1	0	1	0	Diversity + Current Uncertainty + BCR Strata + Forest Birds
88	0	1	1	1	1	0	Diversity + Current Uncertainty + BCR Strata + Disturbance + Forest Birds

#	Prioritization Metric	Geographic Stratification	Uncertainty	Disturbance	Ecological Association	Conservation Status	Conservation Name
89	0	0	1	0	0	1	Diversity + Current Uncertainty + Conservation Status
90	0	0	1	1	0	1	Diversity + Current Uncertainty + Disturbance + Conservation Status
91	0	1	1	0	0	1	Diversity + Current Uncertainty + BCR Strata + Conservation Status
92	0	1	1	1	0	1	Diversity + Current Uncertainty + BCR Strata + Disturbance + Conservation Status
93	0	0	1	0	1	1	Diversity + Current Uncertainty + Forest Birds + Conservation Status
94	0	0	1	1	1	1	Diversity + Current Uncertainty + Disturbance + Forest Birds + Conservation Status
95	0	1	1	0	1	1	Diversity + Current Uncertainty + BCR Strata + Forest Birds + Conservation Status
96	0	1	1	1	1	1	Diversity + Current Uncertainty + BCR Strata + Disturbance + Forest Birds + Conservation Status
97	0	0	2	0	0	0	Diversity + Current/Future Uncertainty
98	0	0	2	1	0	0	Diversity + Current/Future Uncertainty + Disturbance
99	0	1	2	0	0	0	Diversity + Current/Future Uncertainty + BCR Strata
100	0	1	2	1	0	0	Diversity + Current/Future Uncertainty + BCR Strata + Disturbance
101	0	0	2	0	1	0	Diversity + Current/Future Uncertainty + Forest Birds
102	0	0	2	1	1	0	Diversity + Current/Future Uncertainty + Disturbance + Forest Birds
103	0	1	2	0	1	0	Diversity + Current/Future Uncertainty + BCR Strata + Forest Birds
104	0	1	2	1	1	0	Diversity + Current/Future Uncertainty + BCR Strata + Disturbance + Forest Birds
105	0	0	2	0	0	1	Diversity + Current/Future Uncertainty + Conservation Status
106	0	0	2	1	0	1	Diversity + Current/Future Uncertainty + Disturbance + Conservation Status
107	0	1	2	0	0	1	Diversity + Current/Future Uncertainty + BCR Strata + Conservation Status
108	0	1	2	1	0	1	Diversity + Current/Future Uncertainty + BCR Strata + Disturbance + Conservation Status

#	Prioritization Metric	Geographic Stratification	Uncertainty	Disturbance	Ecological Association	Conservation Status	Conservation Name
109	0	0	2	0	1	1	Diversity + Current/Future Uncertainty + Forest Birds + Conservation Status
110	0	0	2	1	1	1	Diversity + Current/Future Uncertainty + Disturbance + Forest Birds + Conservation Status
111	0	1	2	0	1	1	Diversity + Current/Future Uncertainty + BCR Strata + Forest Birds + Conservation Status
112	0	1	2	1	1	1	Diversity + Current/Future Uncertainty + BCR Strata + Disturbance + Forest Birds + Conservation Status
113	0	0	3	0	0	0	Diversity + Future Uncertainty
114	0	0	3	1	0	0	Diversity + Future Uncertainty + Disturbance
115	0	1	3	0	0	0	Diversity + Future Uncertainty + BCR Strata
116	0	1	3	1	0	0	Diversity + Future Uncertainty + BCR Strata + Disturbance
117	0	0	3	0	1	0	Diversity + Future Uncertainty + Forest Birds
118	0	0	3	1	1	0	Diversity + Future Uncertainty + Disturbance + Forest Birds
119	0	1	3	0	1	0	Diversity + Future Uncertainty + BCR Strata + Forest Birds
120	0	1	3	1	1	0	Diversity + Future Uncertainty + BCR Strata + Disturbance + Forest Birds
121	0	0	3	0	0	1	Diversity + Future Uncertainty + Conservation Status
122	0	0	3	1	0	1	Diversity + Future Uncertainty + Disturbance + Conservation Status
123	0	1	3	0	0	1	Diversity + Future Uncertainty + BCR Strata + Conservation Status
124	0	1	3	1	0	1	Diversity + Future Uncertainty + BCR Strata + Disturbance + Conservation Status
125	0	0	3	0	1	1	Diversity + Future Uncertainty + Forest Birds + Conservation Status
126	0	0	3	1	1	1	Diversity + Future Uncertainty + Disturbance + Forest Birds + Conservation Status
127	0	1	3	0	1	1	Diversity + Future Uncertainty + BCR Strata + Forest Birds + Conservation Status
128	0	1	3	1	1	1	Diversity + Future Uncertainty + BCR Strata + Disturbance + Forest Birds + Conservation Status

Table A1.2. Species weights considered in Zonation analysis. Forest species are according to Cornell Lab of Ornithology. Conservation status assigned as follows: 1 = no status; 2 = PIF population trend score 4; 3 = PIF population trend score 5; 4 = listed species at risk. BCR subregion-specific priorities also indicated.

Code	Common Name	Forest spp	Priority Weight	BCR6 -North	BCR7 -North	BCR4 -North	BCR7 -QC	BCR8- QC	BCR7- NL	BCR8- NL	BCR4- Prairie	BCR6- Prairie	BCR7- Prairie	BCR8- West	BCR7- ON	BCR8- ON
ALFL	Alder Flycatcher	0	2	1	1	1	1	0	0	0	1	1	0	1	1	1
ATSP	American Tree Sparrow	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0
BAOR	Baltimore Oriole	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0
BAWW	Black-and-white Warbler	1	2	0	0	0	0	1	0	0	0	0	0	1	0	1
BBWA	Bay-breasted Warbler	1	1	0	0	0	0	1	0	0	1	1	0	1	1	1
BHVI	Blue-headed Vireo	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
BLBW	Blackburnian Warbler	1	1	0	0	0	0	1	0	0	1	1	0	0	0	1
BLPW	Blackpoll Warbler	1	3	1	1	1	1	0	0	0	0	0	1	0	0	0
BOCH	Boreal Chickadee	1	2	1	1	1	1	1	1	0	1	1	1	0	1	0
BRCR	Brown Creeper	1	1	0	0	0	0	1	0	0	1	1	0	1	0	0
BTNW	Black-throated Green Warbler	1	1	0	0	0	0	1	0	1	1	1	0	0	0	1
CAWA	Canada Warbler	1	4	0	0	0	0	1	0	0	1	1	0	1	1	1

Code	Common Name	Forest spp	Priority Weight	BCR6 -North	BCR7 -North	BCR4 -North	BCR7 -QC	BCR8- QC	BCR7- NL	BCR8- NL	BCR4- Prairie	BCR6- Prairie	BCR7- Prairie	BCR8- West	BCR7- ON	BCR8- ON
CCSP	Clay-colored Sparrow	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0
CMWA	Cape May Warbler	1	3	0	0	0	0	1	0	0	1	1	0	1	0	1
CONW	Connecticut Warbler	1	3	1	1	1	0	1	0	0	0	0	0	1	0	1
COYE	Common Yellowthroat	0	2	0	0	0	0	0	0	0	1	1	0	1	0	0
CSWA	Chestnut-sided Warbler	0	2	0	0	0	0	1	0	0	0	0	0	1	0	1
EAKI	Eastern Kingbird	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1
EAPH	Easter Phoebe	0	1	0	0	0	0	0	0	0	1	1	1	1	0	0
EAWP	Eastern Wood-pewee	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
EVGR	Evening Grosbeak	1	3	0	0	0	0	1	0	0	0	0	0	1	0	1
FOSP	Fox Sparrow	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0
GCKI	Golden-crowned Kinglet	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
GCTH	Gray-cheeked Thrush	1	1	0	0	0	1	0	1	1	0	0	0	0	0	0
GRAJ	Gray Jay	1	2	1	1	1	0	1	1	0	0	0	0	0	1	0
GRCA	Gray Catbird	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
HAFL	Hammond's Flycatcher	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
LCSP	LeConte's Sparrow	0	3	0	0	0	1	0	0	0	1	1	0	0	0	0

Code	Common Name	Forest spp	Priority Weight	BCR6 -North	BCR7 -North	BCR4 -North	BCR7 -QC	BCR8- QC	BCR7- NL	BCR8- NL	BCR4- Prairie	BCR6- Prairie	BCR7- Prairie	BCR8- West	BCR7- ON	BCR8- ON
LEFL	Least Flycatcher	1	2	0	0	0	0	0	0	0	1	1	0	1	0	0
LISP	Lincoln's Sparrow	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0
MAWA	Magnolia Warbler	1	1	0	0	0	0	1	0	1	0	0	0	0	0	1
MOWA	Mourning Warbler	1	2	0	0	0	0	1	0	1	1	1	0	1	0	1
NAWA	Nashville Warbler	1	1	0	0	0	0	1	0	0	0	0	0	1	0	1
OCWA	Orange-crowned Warbler	1	2	0	0	0	1	1	0	0	0	0	0	0	1	0
OSFL	Olive-sided Flycatcher	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1
OVEN	Ovenbird	1	1	0	0	0	0	1	0	0	0	0	0	1	0	1
PAWA	Palm Warbler	1	2	0	0	0	1	0	1	0	0	0	1	0	1	0
PHVI	Philadelphia Vireo	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1
PIGR	Pine Grosbeak	1	2	1	1	1	1	1	1	0	0	0	0	1	1	1
PISI	Pine Siskin	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0
PUFI	Purple Finch	1	2	0	0	0	0	1	0	1	0	0	0	1	0	1
RBGR	Rose-breasted Grosbeak	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
RCKI	Ruby-crowned Kinglet	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1
RUBL	Rusty Blackbird	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1

Code	Common Name	Forest spp	Priority Weight	BCR6 -North	BCR7 -North	BCR4 -North	BCR7 -QC	BCR8- QC	BCR7- NL	BCR8- NL	BCR4- Prairie	BCR6- Prairie	BCR7- Prairie	BCR8- West	BCR7- ON	BCR8- ON
SAVS	Savannah Sparrow	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
SEWR	Sedge Wren	0	1	0	0	0	0	1	0	0	1	1	0	1	0	0
SOSP	Song Sparrow	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
SWSP	Swamp Sparrow	0	1	0	0	0	1	1	1	1	0	0	1	1	1	1
SWTH	Swainson's Thrush	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
TEWA	Tennessee Warbler	1	1	0	0	0	1	1	0	0	0	0	0	0	1	1
TOWA	Townsend's Warbler	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0
VATH	Varied Thrush	1	3	1	1	1	0	0	0	0	0	0	0	0	0	0
VEER	Veery	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
WBNU	White-breasted Nuthatch	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
WCSP	White-crowned Sparrow	0	2	1	1	1	0	0	0	0	0	0	1	0	0	0
WETA	Western Tanager	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0
WEWP	Western Wood-pewee	1	2	0	0	0	0	0	0	0	1	1	0	0	0	0
WIWA	Wilson's Warbler	1	3	1	1	1	0	0	0	0	0	0	0	0	0	0
WIWR	Winter Wren	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1
WTSP	White-throated Sparrow	1	2	0	0	0	1	1	0	1	1	1	1	0	0	1

Code	Common Name	Forest spp	Priority Weight	BCR6 -North	BCR7 -North	BCR4 -North	BCR7 -QC	BCR8- QC	BCR7- NL	BCR8- NL	BCR4- Prairie	BCR6- Prairie	BCR7- Prairie	BCR8- West	BCR7- ON	BCR8- ON
WWCR	White-winged Crossbill	1	1	0	0	0	1	0	0	0	1	1	0	1	1	0
YBFL	Yellow-bellied Flycatcher	1	1	0	0	0	0	1	0	1	0	0	0	1	0	1
YEWA	Yellow Warbler	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0