

Appendix I

Mammals	
Species Name	GBIF total records
<i>Ammospermophilus leucurus</i>	3112
<i>Antrozous pallidus</i>	8532
<i>Arctocephalus townsendi</i>	117
<i>Balaenoptera edéni</i>	452
<i>Balaenoptera acutorostrata</i>	11649
<i>Balaenoptera musculus</i>	6321
<i>Balaenoptera physalus</i>	94475
<i>Bassariscus astutus</i>	3165
<i>Canis latrans</i>	24842
<i>Chaetodipus arenarius</i>	4847
<i>Chaetodipus fallax</i>	4430
<i>Chaetodipus baileyi</i>	7632
<i>Chaetodipus intermedius</i>	6800
<i>Chaetodipus penicillatus</i>	12052
<i>Chaetodipus spinatus</i>	7286
<i>Corynorhinus townsendii</i>	8720
<i>Delphinus capensis</i>	922
<i>Delphinus delphis</i>	12170
<i>Dipodomys merriami</i>	42381
<i>Eptesicus furinalis</i>	2286
<i>Eschrichtius robustus</i>	5098
<i>Feresa attenuata</i>	191
<i>Globicephala macrorhynchus</i>	1409
<i>Glossophaga soricina</i>	33757
<i>Grampus griseus</i>	3766
<i>Kogia sima</i>	573
<i>Lagenorhynchus obliquidens</i>	1671
<i>Lepus insularis</i>	263
<i>Lasiurus cinereus</i>	7772
<i>Lasiurus xanthinus</i>	610
<i>Leptonycteris nivalis</i>	2980
<i>Lepus alleni</i>	774
<i>Lepus californicus</i>	9296
<i>Lynx rufus</i>	17635
<i>Macrotus californicus</i>	4320
<i>Megaptera novaeangliae</i>	28654
<i>Mesoplodon peruvianus</i>	72
<i>Mirounga angustirostris</i>	1345
<i>Mormoops megalophylla</i>	8109
<i>Musonycteris harrisoni</i>	158
<i>Myotis californicus</i>	5898
<i>Myotis vivesi</i>	1140
<i>Nasua narica</i>	3403
<i>Neotoma albigula</i>	15290
<i>Neotoma anthonyi</i>	29
<i>Neotoma bryanti</i>	2554
<i>Neotoma bunkeri</i>	15
<i>Neotoma lepida</i>	11344
<i>Neotoma martinensis</i>	8

Mammals	
Species Name	GBIF total records
<i>Neotoma albigula</i>	15290
<i>Notiosorex crawfordi</i>	1512
<i>Nyctinomops femorosaccus</i>	1042
<i>Odocoileus hemionus</i>	7685
<i>Orcinus orca</i>	3090
<i>Ovis canadensis</i>	10868
<i>Peponocephala electra</i>	330
<i>Peromyscus eremicus</i>	27362
<i>Peromyscus eva</i>	1855
<i>Peromyscus guardia</i>	173
<i>Peromyscus caniceps</i>	95
<i>Peromyscus dickeyi</i>	198
<i>Peromyscus interparietalis</i>	576
<i>Peromyscus maniculatus</i>	222.624
<i>Peromyscus merriami</i>	1152
<i>Peromyscus pambertoni</i>	18
<i>Peromyscus pseudocrinitus</i>	74
<i>Peromyscus sejugis</i>	348
<i>Peromyscus slevini</i>	135
<i>Peromyscus stephani</i>	121
<i>Phoca vitulina</i>	19463
<i>Pipistrellus hesperus</i>	7290
<i>Procyon lotor</i>	56
<i>Procyon pygmaeus</i>	56
<i>Pseudorca crassidens</i>	1187
<i>Reithrodontomys spectabilis</i>	178
<i>Spermophilus tereticaudus</i>	2705
<i>Spermophilus variegatus</i>	5970
<i>Stenella longirostris</i>	2692
<i>Stenella attenuata</i>	5639
<i>Stenella coeruleoalba</i>	4243
<i>Steno bredanensis</i>	863
<i>Sylvilagus bachmani</i>	2274
<i>Sylvilagus graysoni</i>	110
<i>Sylvilagus mansuetus</i>	98
<i>Tadarida brasiliensis</i>	341
<i>Thomomys bottae</i>	39572
<i>Thomomys umbrinus</i>	10260
<i>Trichechus manatus</i>	1811
<i>Tursiops truncatus</i>	30027
<i>Urocyon cinereoargenteus</i>	9243
<i>Zalophus californianus</i>	10314
<i>Ziphius cavirostris</i>	1608
Birds	
Species Name (2006)	GBIF total records
<i>Actitis macularius</i>	759695
<i>Aimophila ruficeps</i>	65683
<i>Amazona oratrix</i>	4040
<i>Anas acuta</i>	767044

Birds	
Species Name (2006)	GBIF total records
<i>Anas americana</i>	769168
<i>Anas clypeata</i>	1222929
<i>Anas crecca</i>	1544223
<i>Anas cyanoptera</i>	242469
<i>Anas discors</i>	625548
<i>Anas platyrhynchos</i>	5321407
<i>Anhinga anhinga</i>	263549
<i>Anous minutus</i>	9923
<i>Anous stolidus</i>	18121
<i>Anser albifrons</i>	270840
<i>Antrostomus badius</i>	286
<i>Aramus guarauna</i>	68637
<i>Aratinga brevipes</i>	59
<i>Ardea alba</i>	1745615
<i>Ardea herodias</i>	2768177
<i>Arenaria interpres</i>	428469
<i>Arenaria melanocephala</i>	74405
<i>Aythya affinis</i>	576103
<i>Aythya americana</i>	375321
<i>Aythya collaris</i>	708914
<i>Aythya valisineria</i>	257783
<i>Bartramia longicauda</i>	55866
<i>Bubo virginianus</i>	346998
<i>Bubulcus ibis</i>	716009
<i>Bucephala albeola</i>	1088414
<i>Butorides virescens</i>	661885
<i>Cairina moschata</i>	39686
<i>Calidris alba</i>	442865
<i>Calidris alpina</i>	785787
<i>Calidris bairdii</i>	93011
<i>Calidris canutus</i>	209527
<i>Calidris fuscicollis</i>	79309
<i>Calidris himantopus</i>	100035
<i>Calidris mauri</i>	248957
<i>Calidris melanotos</i>	224983
<i>Calidris minutilla</i>	665378
<i>Calidris pusilla</i>	299559
<i>Calidris virgata</i>	31110
<i>Cardellina pusilla</i>	474221
<i>Cardinalis cardinalis</i>	4923935
<i>Cathartes aura</i>	3037793
<i>Cerorhinca monocerata</i>	57914
<i>Charadrius semipalmatus</i>	406815
<i>Charadrius vociferus</i>	2056655
<i>Charadrius collaris</i>	11380
<i>Charadrius melodus</i>	82045
<i>Charadrius montanus</i>	9742
<i>Charadrius nivosus</i>	58313
<i>Charadrius semipalmatus</i>	406815
<i>Charadrius wilsonia</i>	50089
<i>Chen caerulescens</i>	269245

Birds	
Species Name (2006)	GBIF total records
<i>Chen rossii</i>	58938
<i>Chlidonias niger</i>	333686
<i>Chloroceryle aenea</i>	7767
<i>Chloroceryle americana</i>	53025
<i>Cochlearius cochlearius</i>	10101
<i>Colaptes auratus</i>	2779986
<i>Columbina passerina</i>	199023
<i>Coragyps atratus</i>	927262
<i>Crotophaga sulcirostris</i>	65036
<i>Cyclarhis gujanensis</i>	34185
<i>Dendrocygna autumnalis</i>	154927
<i>Dendrocygna bicolor</i>	32269
<i>Diomedea immutabilis</i>	12068
<i>Phoebastria nigripes</i>	28079
<i>Egretta caerulea</i>	442000
<i>Egretta rufescens</i>	86999
<i>Egretta thula</i>	921359
<i>Egretta tricolor</i>	84
<i>Eudocimus albus</i>	417347
<i>Falco peregrinus</i>	446209
<i>Fregata magnificens</i>	111273
<i>Fregata minor</i>	9664
<i>Fulica americana</i>	1424279
<i>Gallinula galeata</i>	—
<i>Gavia immer</i>	684606
<i>Geothlypis formosa</i>	77686
<i>Glaucidium griseiceps</i>	702
<i>Granatellus venustus</i>	1253
<i>Grus canadensis</i>	407149
<i>Haematopus palliatus</i>	156285
<i>Himantopus mexicanus</i>	371001
<i>Sterna caspia</i>	522584
<i>Icterus cucullatus</i>	100503
<i>Ixobrychus exilis</i>	58689
<i>Jacana spinosa</i>	28789
<i>Junco insularis</i>	418
<i>Larus heermanni</i>	126108
<i>Larus occidentalis</i>	345745
<i>Larus californicus</i>	397694
<i>Larus canus</i>	991699
<i>Larus delawarensis</i>	2332775
<i>Larus glaucescens</i>	339761
<i>Larus heermanni</i>	126108
<i>Larus livens</i>	8544
<i>Larus occidentalis</i>	345745
<i>Leucophaeus atricilla</i>	354283
<i>Leucophaeus pipixcan</i>	117690
<i>Limnodromus griseus</i>	220370
<i>Limnodromus scolopaceus</i>	211052
<i>Limosa fedoa</i>	184455
<i>Megaceryle alcyon</i>	1411615

Birds	
Species Name (2006)	GBIF total records
<i>Megascops guatemalae</i>	2126
<i>Megascops kennicottii</i>	33970
<i>Melanitta perspicillata</i>	304296
<i>Melospiza lincolni</i>	405446
<i>Melospiza fusca</i>	96609
<i>Mergus serrator</i>	967918
<i>Mimus graysoni</i>	288
<i>Mycteria americana</i>	157568
<i>Myiarchus tuberculifer</i>	69777
<i>Numenius americanus</i>	135299
<i>Numenius phaeopus</i>	343771
<i>Nyctanassa violacea</i>	162607
<i>Nycticorax nycticorax</i>	518518
<i>Oceanodroma castro</i>	7891
<i>Oceanodroma homochroa</i>	8692
<i>Oceanodroma leucorhoa</i>	42643
<i>Oceanodroma melania</i>	13749
<i>Oceanodroma microsoma</i>	3391
<i>Oceanodroma homochroa</i>	8692
<i>Oceanodroma leucorhoa</i>	42643
<i>Oceanodroma macrodactyla</i>	243
<i>Oceanodroma melania</i>	13749
<i>Oceanodroma microsoma</i>	3391
<i>Oceanodroma tethys</i>	2770
<i>Onychoprion anaethetus</i>	13974
<i>Onychoprion fuscatus</i>	25889
<i>Leiothlypis celata</i>	605714
<i>Leiothlypis peregrina</i>	274762
<i>Leiothlypis ruficapilla</i>	382102
<i>Oxyura jamaicensis</i>	712019
<i>Pandion haliaetus</i>	1260662
<i>Parkesia motacilla</i>	131963
<i>Parkesia noveboracensis</i>	272477
<i>Parula pitiayumi</i>	2598
<i>Passer domesticus</i>	4253591
<i>Passerina caerulea</i>	258187
<i>Patagioenas flavirostris</i>	35987
<i>Pelecanus erythrorhynchos</i>	408913
<i>Pelecanus occidentalis</i>	549569
<i>Phaethon aethereus</i>	7070
<i>Phalacrocorax auritus</i>	2011586
<i>Phalacrocorax penicillatus</i>	115117
<i>Phalacrocorax auritus</i>	2011586
<i>Phalacrocorax brasilianus</i>	206314
<i>Phalacrocorax pelagicus</i>	138217
<i>Phalacrocorax penicillatus</i>	115117
<i>Phalaropus fulicarius</i>	47854
<i>Phalaropus lobatus</i>	142692
<i>Phalaropus tricolor</i>	138837
<i>Pheugopedius felix</i>	8225
<i>Phoebastria albatrus</i>	2337

Birds	
Species Name (2006)	GBIF total records
<i>Phoebastria immutabilis</i>	12068
<i>Phoebastria nigripes</i>	28079
<i>Phoenicopterus ruber</i>	30077
<i>Piranga bidentata</i>	10977
<i>Platalea ajaja</i>	142663
<i>Pluvialis dominica</i>	77650
<i>Pluvialis fulva</i>	66867
<i>Pluvialis squatarola</i>	588384
<i>Podiceps nigricollis</i>	296386
<i>Podilymbus podiceps</i>	1151778
<i>Caracara lutosa</i>	8
<i>Porphyrio martinica</i>	56656
<i>Porzana carolina</i>	210564
<i>Pterodroma cookii</i>	1617
<i>Pterodroma neglecta</i>	827
<i>Pterodroma phaeopygia</i>	7385
<i>Ptychoramphus aleuticus</i>	40503
<i>Ptychoramphus aleuticus</i>	40503
<i>Puffinus auricularis</i>	281
<i>Puffinus opisthomelas</i>	20441
<i>Puffinus creatopus</i>	40015
<i>Puffinus griseus</i>	108817
<i>Puffinus opisthomelas</i>	20441
<i>Puffinus pacificus</i>	82635
<i>Puffinus tenuirostris</i>	135042
<i>Rallus limicola</i>	147749
<i>Recurvirostra americana</i>	272007
<i>Rissa tridactyla</i>	194066
<i>Rynchops niger</i>	142333
<i>Setophaga americana</i>	506144
<i>Setophaga castanea</i>	107360
<i>Setophaga cerulea</i>	53571
<i>Setophaga citrina</i>	184752
<i>Setophaga coronata</i>	2350719
<i>Setophaga discolor</i>	190158
<i>Setophaga dominica</i>	178863
<i>Setophaga fusca</i>	206037
<i>Setophaga magnolia</i>	396048
<i>Setophaga nigrescens</i>	126652
<i>Setophaga palmarum</i>	527292
<i>Setophaga pensylvanica</i>	355131
<i>Setophaga petechia</i>	1212597
<i>Setophaga pitaiyumi</i>	35953
<i>Setophaga striata</i>	231487
<i>Setophaga tigrina</i>	108848
<i>Setophaga townsendi</i>	202054
<i>Setophaga virens</i>	429440
<i>Sphyrapicus varius</i>	528884
<i>Spinus psaltria</i>	696736
<i>Spiza americana</i>	136864
<i>Stelgedopteryx serripennis</i>	659369

Birds	
Species Name (2006)	GBIF total records
<i>Stercorarius pomarinus</i>	62305
<i>Sterna anaethetus</i>	13974
<i>Sterna elegans</i>	62405
<i>Sterna fuscata</i>	—
<i>Sterna maxima</i>	272830
<i>Sterna forsteri</i>	429478
<i>Sterna hirundo</i>	646877
<i>Sternula antillarum</i>	161999
<i>Sula granti</i>	3087
<i>Sula leucogaster</i>	39534
<i>Sula nebouxii</i>	14032
<i>Sula sula</i>	9915
<i>Sula dactylatra</i>	9071
<i>Sula leucogaster</i>	39534
<i>Sula nebouxii</i>	14032
<i>Synthliboramphus hypoleucus</i>	7130
<i>Synthliboramphus craveri</i>	1678
<i>Synthliboramphus hypoleucus</i>	7130
<i>Synthliboramphus scrippsi</i>	4675
<i>Sterna elegans</i>	62405
<i>Thalasseus maximus</i>	272832
<i>Sterna sandvicensis</i>	237695
<i>Tigrisoma mexicanum</i>	14954
<i>Toxostoma guttatum</i>	236
<i>Tringa flavipes</i>	493255
<i>Heteroscelus incana</i>	34372
<i>Tringa melanoleuca</i>	717942
<i>Tringa semipalmata</i>	470248
<i>Tringa solitaria</i>	247133
<i>Troglodytes tanneri</i>	227
<i>Troglodytes sissonii</i>	379
<i>Vermivora chrysoptera</i>	52440
<i>Vermivora cyanoptera</i>	136467
<i>Vireo flavoviridis</i>	13908
<i>Xema sabini</i>	29919
<i>Zenaida aurita</i>	28124
<i>Zenaida graysoni</i>	207
Reptiles	
Species Name (CAT, 2013)	GBIF total records
<i>Agkistrodon bilineatus</i>	534
<i>Anniella geronimensis</i>	380
<i>Anniella pulchra</i>	3451
<i>Anolis nebulosus</i>	4011
<i>Aspidoscelis ceralbensis</i>	378
<i>Aspidoscelis hyperythra</i>	4471
<i>Aspidoscelis tigris</i>	31679
<i>Aspidoscelis communis</i>	1776
<i>Aspidoscelis cozumela</i>	481
<i>Aspidoscelis guttata</i>	2511

Reptiles	
Species Name (CAT, 2013)	GBIF total records
<i>Aspidoscelis rodecki</i>	156
<i>Gopherus agassizii</i>	3123
<i>Masticophis mentovarius</i>	1585
<i>Bipes biporus</i>	3074
<i>Boa constrictor</i>	5790
<i>Bogertophis rosaliae</i>	47
<i>Callisaurus draconoides</i>	23722
<i>Callisaurus draconoides</i>	24128
<i>Caretta caretta</i>	26736
<i>Charina trivirgata</i>	386
<i>Chelonia mydas</i>	20487
<i>Chilomeniscus stramineus</i>	1021
<i>Chilomeniscus savagei</i>	17
<i>Aspidoscelis bacatus</i>	—
<i>Aspidoscelis canus</i>	—
<i>Aspidoscelis carmenensis</i>	—
<i>Aspidoscelis catalinensis</i>	—
<i>Aspidoscelis ceralbensis</i>	378
<i>Aspidoscelis costata</i>	3428
<i>Aspidoscelis gularis</i>	10691
<i>Aspidoscelis hyperythra</i>	4471
<i>Aspidoscelis communis</i>	1776
<i>Aspidoscelis martyris</i>	—
<i>Aspidoscelis estebanensis</i>	—
<i>Coleonyx gypsicolus</i>	—
<i>Coleonyx variegatus</i>	6561
<i>Crocodylus moreletii</i>	3665
<i>Crotalus mitchellii</i>	475292
<i>Crotalus atrox</i>	9861
<i>Crotalus oreganus</i>	6530
<i>Crotalus catalinensis</i>	61
<i>Crotalus cerastes</i>	4385
<i>Crotalus enyo</i>	538
<i>Crotalus estebanensis</i>	—
<i>Crotalus stephensi</i>	475305
<i>Crotalus ruber</i>	2623
<i>Crotalus tigris</i>	546
<i>Crotalus atrox</i>	9861
<i>Crotaphytus dickersonae</i>	284
<i>Ctenosaura nolascentis</i>	—
<i>Ctenosaura acanthura</i>	822
<i>Ctenosaura pectinata</i>	2871
<i>Ctenosaura similis</i>	4174
<i>Dermochelys coriacea</i>	4433
<i>Diadophis punctatus</i>	19121
<i>Leptophis diplotropis</i>	741
<i>Dipsosaurus dorsalis</i>	7838
<i>Mastigodryas melanolomus</i>	2446
<i>Elgaria cedrosensis</i>	26
<i>Elgaria multicaarinata</i>	8662
<i>Elgaria nana</i>	—

Reptiles	
Species Name (CAT, 2013)	GBIF total records
<i>Eretmochelys imbricata</i>	4774
<i>Eridiphas slevini</i>	—
<i>Gambelia copeii</i>	189
<i>Gambelia wislizenii</i>	4864
<i>Hypsiglena chlorophaea</i>	391
<i>Kinosternon integrum</i>	4112
<i>Lampropeltis catalinensis</i>	—
<i>Lampropeltis herrerae</i>	—
<i>Lampropeltis zonata</i>	777
<i>Lepidochelys olivacea</i>	5910
<i>Leptophis diplotropis</i>	741
<i>Rena humilis</i>	753
<i>Masticophis aurigulus</i>	29
<i>Masticophis bilineatus</i>	16
<i>Masticophis flagellum</i>	1313
<i>Coluber fuliginosus</i>	355
<i>Masticophis slevini</i>	6
<i>Mastigodryas melanolomus</i>	1872
<i>Micruroides euryxanthus</i>	555
<i>Oxybelis aeneus</i>	4599
<i>Pelamis platurus</i>	1262
<i>Petrosaurus repens</i>	116
<i>Petrosaurus slevini</i>	—
<i>Petrosaurus thalassinus</i>	1010
<i>Phrynosoma coronatum</i>	4182
<i>Phrynosoma solare</i>	1674
<i>Phyllodactylus nocticolus</i>	307
<i>Phyllodactylus bugastrolepis</i>	94
<i>Phyllodactylus homolepidurus</i>	366
<i>Phyllodactylus partidus</i>	51
<i>Phyllodactylus unctus</i>	742
<i>Phyllodactylus xanti</i>	1400
<i>Phyllodactylus tuberculosus</i>	2405
<i>Phyllorhynchus decurtatus</i>	2877
<i>Pituophis catenifer</i>	15394
<i>Pituophis insulanus</i>	—
<i>Pituophis vertebralis</i>	55
<i>Rhinocheilus etheridgei</i>	—
<i>Salvadora hexalepis</i>	2431
<i>Sceloporus angustus</i>	625
<i>Sceloporus grandaevus</i>	1050
<i>Sauromalus hispidus</i>	379
<i>Sauromalus ater</i>	2726
<i>Sauromalus slevini</i>	50
<i>Sauromalus varius</i>	325
<i>Sceloporus clarckii</i>	6843
<i>Sceloporus hunsakeri</i>	916
<i>Sceloporus lineatulus</i>	15
<i>Sceloporus occidentalis</i>	32209
<i>Sceloporus orcutti</i>	2804
<i>Sceloporus zosteromus</i>	928

Reptiles	
Species Name (CAT, 2013)	GBIF total records
<i>Sceloporus smithi</i>	160
<i>Sceloporus variabilis</i>	16407
<i>Sibon nebulatus</i>	1448
<i>Sonora semianulata</i>	7124
<i>Tantilla planiceps</i>	387
<i>Trimorphodon biscutatus</i>	2389
<i>Urosaurus nigricaudus</i>	4514
<i>Urosaurus ornatus</i>	20571
<i>Uta nolascensis</i>	118
<i>Uta palmeri</i>	733
<i>Uta squamata</i>	312
<i>Uta stansburiana</i>	59717
Amphibians	
Species Name (2011)	GBIF total records
<i>Anaxyrus cognatus (Bufo cognatus)</i>	11315
<i>Anaxyrus californicus (Bufo californicus)</i>	1574
<i>Anaxyrus punctatus (Bufo punctatus)</i>	13143
<i>Anaxyrus woodhousii (Bufo woodhousii)</i>	21016
<i>Aneides lugubris</i>	5998
<i>Batrachoseps major</i>	5096
<i>Anaxyrus punctatus (Bufo punctatus)</i>	13143
<i>Incilius alvarius</i>	2197
<i>Anaxyrus boreas</i>	19304
<i>Ensatina eschscholtzii</i>	18034
<i>Pseudacris regilla</i>	25399
<i>Hypopachus variolosus</i>	4752
<i>Incilius alvarius</i>	2197
<i>Leptodactylus fragilis</i>	2289
<i>Leptodactylus melanonotus</i>	12435
<i>Lithobates berlandieri</i>	15354
<i>Lithobates catesbeianus</i>	28829
<i>Lithobates forreri</i>	3085
<i>Lithobates yavapaiensis</i>	2388
<i>Pseudacris regilla</i>	25399
<i>Lithobates berlandieri</i>	15354
<i>Lithobates catesbeianus</i>	28829
<i>Lithobates forreri</i>	3085
<i>Lithobates yavapaiensis</i>	2388
<i>Scaphiopus couchii</i>	12425
<i>Smilisca baudinii</i>	16555
<i>Spea hammondi</i>	4847

Appendix II

Area loss, gains and net change for all species evaluated. Total number of pixels: number of pixels in Mexico at 1 km² resolution. #Unique data: number of unique georeferenced data in a 1 km² resolution cell. #Pixels: number of pixels in which the species is present. %Loss: geographic area that was climatically suitable under current conditions and will not be suitable in the future. %Gains: geographic area that was not suitable under current climatic conditions but will be climatically suitable in the future. Net change: difference between %gains and %loss. Short term: 2015-2039. Long term: 2075-2099.

		LONG TERM									
		4.5 Wm ⁻²					8.5 Wm ⁻²				
	Mammals	#Unique Data	IUCN	NOM-059	% Loss	% Gains	Net Change	% Loss	% Gains	Net Change	
1	<i>Ammospermophilus leucurus</i>	564	Least Concern	N/A	31.759	39.135	7.376	46.873	61.197	14.323	
2	<i>Chaetodipus arenarius</i>	300	Least Concern	A	12.915	111.490	98.575	40.863	166.061	125.198	
3	<i>Chaetodipus baileyi</i>	786	Least Concern	P	38.206	23.536	-14.670	52.650	36.919	-15.731	
4	<i>Chaetodipus intermedius</i>	772	Least Concern	A	16.998	83.188	66.190	10.708	147.301	136.593	
5	<i>Chaetodipus penicillatus</i>	719	Least Concern	A	24.156	39.338	15.183	25.960	56.070	30.110	
6	<i>Dipodomys merriami</i>	1567	Least Concern	P	9.485	25.953	16.469	15.101	31.568	16.467	
7	<i>Leptomycoteris yerbabuense</i>	348	Near Threatened	N/A	11.75	58.868	47.118	12.856	96.749	83.893	
8	<i>Lepus alleni</i>	1167	Least Concern	Pr	23.399	86.200	62.800	42.745	121.606	78.861	
9	<i>Lepus californicus</i>	600	Least Concern	Pr	22.740	31.510	8.770	35.789	30.448	-5.341	
10	<i>Macrotus californicus</i>	286	Least Concern	N/A	30.451	55.248	24.797	52.442	139.796	87.354	
11	<i>Myotis californicus</i>	505	Least Concern	N/A	26.107	50.116	24.009	27.437	62.448	35.010	
12	<i>Myotis vivesi</i>	38	Vulnerable	P	6.188	794.486	788.299	4.930	1782.440	1777.510	
13	<i>Neotoma lepida</i>	365	Least Concern	A	12.264	64.976	52.711	26.112	61.021	34.909	
14	<i>Peromyscus eremicus</i>	1095	Least Concern	A	21.639	43.134	21.495	31.917	53.171	21.254	
15	<i>Peromyscus eva</i>	83	Least Concern	A	30.887	125.711	94.824	88.654	125.042	36.285	
16	<i>Peromyscus merriami</i>	155	Least Concern	N/A	14.754	138.202	123.448	7.631	348.678	341.046	
17	<i>Reithrodontomys spectabilis</i>	11	Critically Endangered	A	8.137	3135.029	3126.891	0.000	13771.392	13771.392	
18	<i>Spermophilus tereticaudus</i>	240	Least Concern	N/A	16.234	122.744	106.510	14.109	275.209	261.100	
19	<i>Sylvilagus bachmani</i>	63	Least Concern	P	15.943	56.224	40.281	29.583	84.021	54.438	
20	<i>Thomomys bottae</i>	472	Least Concern	N/A	30.422	51.213	20.791	37.044	68.552	31.508	

Total pixel number 5053748					SHORT TERM									
					4.5 Wm ⁻²					8.5 Wm ⁻²				
Reptiles		#Unique Data	IUCN	NOM-059	#Pixels	% Loss	% Gains	Net Change	% Loss	% Gains	% Loss	% Gains	Net Change	
1	<i>Aspidoscelis hyperythra</i>	173	Least Concern	A	185098	14.727	75.030	60.303	15.504	72.754	15.504	72.754	57.249	
2	<i>Crotaphytus dickersonae</i>	27	Least Concern	N/A	77908	34.677	56.225	21.548	33.306	56.483	33.306	56.483	23.177	
3	<i>Ctenosaura hemilopha</i>	288	Vulnerable D2	Pr	281833	5.531	126.562	121.031	6.399	130.049	6.399	130.049	123.650	
4	<i>Drymarchon corais</i>	260	Least Concern	N/A	975741	25.031	38.805	13.774	27.325	40.197	27.325	40.197	12.872	
5	<i>Eridiphas slevini</i>	22	Least Concern	A	66320	2.122	660.311	658.188	2.873	641.996	2.873	641.996	639.123	
6	<i>Lampropeltis zonata</i>	165	Least Concern	A	64577	37.019	25.974	-11.046	39.025	26.866	39.025	26.866	-12.159	
7	<i>Masticophis bilineatus</i>	282	Least Concern	N/A	789933	19.080	45.665	26.585	17.151	49.319	17.151	49.319	32.167	
8	<i>Mastigodryas melanolomus</i>	294	Least Concern	N/A	620467	26.649	12.561	-14.088	26.931	12.844	26.931	12.844	-14.087	
9	<i>Phyllodactylus homolepidurus</i>	59	Least Concern	Pr	81261	75.256	126.549	51.293	65.720	133.501	65.720	133.501	67.781	
10	<i>Petrosaurus thalassinus</i>	164	Least Concern	Pr	173164	79.834	88.863	9.028	81.684	87.171	81.684	87.171	5.487	
11	<i>Phyllodactylus xanti</i>	228	Least Concern	Pr	207289	16.252	36.359	20.107	18.324	34.018	18.324	34.018	15.694	
12	<i>Phyllodactylus unctus</i>	172	Near Threatened	Pr	21575	28.496	159.800	131.304	26.477	138.678	26.477	138.678	112.201	
13	<i>Boa constrictor</i>	458	N/A	A	828804	4.507	23.962	19.456	3.815	26.113	3.815	26.113	22.299	
14	<i>Ctenosaura pectinata</i>	319	N/A	A	511803	7.192	42.323	35.131	8.149	42.089	8.149	42.089	33.940	
15	<i>Oxybelis aeneus</i>	369	N/A	N/A	116442	16.920	15.807	-1.113	15.814	16.579	15.814	16.579	0.765	
16	<i>Pituophis catenifer</i>	374	Least Concern	N/A	712538	30.134	40.528	10.394	27.758	43.704	27.758	43.704	15.946	
17	<i>Phyllorhynchus decurtatus</i>	713	Least Concern	N/A	464007	16.300	34.900	18.600	15.620	44.328	15.620	44.328	28.708	
18	<i>Crotalus molossus</i>	474	Least Concern	Pr	176463	49.374	9.077	-40.297	48.223	10.097	48.223	10.097	-38.126	
19	<i>Crotalus cerastes</i>	346	Least Concern	Pr	367277	14.201	25.71	11.509	13.313	32.851	13.313	32.851	19.538	
20	<i>Crotalus tigris</i>	141	Least Concern	Pr	302281	22.763	73.093	50.33	22.763	73.093	22.763	73.093	50.33	

5053748						SHORT TERM									
						4.5 Wm ⁻²					8.5 Wm ⁻²				
	Amphibians	#Unique Data	IUCN	NOM-059	#Pixels	% Loss	% Gains	Net Change	% Loss	% Gains	Net Change	% Loss	% Gains	Net Change	
1	<i>Anaxyrus californicus</i>	27	Endangered	A	43676	23.592	51.711	28.119	25.5	48.985	23.485				
2	<i>Anaxyrus cognatus</i>	323	Least Concern	N/A	851596	14.801	8.758	-6.043	15.477	8.388	-7.088				
3	<i>Anaxyrus punctatus</i>	637	Least Concern	N/A	1355732	0.874	104.168	103.294	0.794	94.706	93.912				
4	<i>Anaxyrus woodhousii</i>	10	Least Concern	N/A	573674	5.563	192.055	186.493	6.715	174.868	168.153				
5	<i>Aneides lugubris</i>	7	Least Concern	Pr	166068	26.357	29.9	3.543	25.968	23.795	-2.172				
6	<i>Batrachoseps major</i>	52	Least Concern	N/A	34616	16.02	17.546	1.525	16.93	17.56	0.63				
7	<i>Incilius alvarius</i>	134	Least Concern	N/A	218135	26.927	93.116	66.189	27.317	86.381	59.064				
8	<i>Lithobates berlandieri</i>	982	Least Concern	Pr	1075020	11.823	116.217	104.395	9.775	112.176	102.402				
9	<i>Lithobates catesbeianus</i>	128	Least Concern	N/A	808750	15.183	47.762	32.579	15.017	46.451	31.434				
10	<i>Lithobates forreri</i>	224	Least Concern	Pr	942091	21.803	107.789	85.986	22.93	103.447	80.516				
11	<i>Lithobates yavapaiensis</i>	12	Least Concern	Pr	989937	9.391	66.389	56.999	10.624	66.913	56.29				
12	<i>Pseudacris cadaverina</i>	22	Least Concern	N/A	246942	0.082	55.856	55.774	0.131	57.043	56.913				
13	<i>Pseudacris regilla</i>	95	Least Concern	N/A	205382	16.073	119.398	103.324	16.985	119.385	102.401				
14	<i>Spea hammondi</i>	311	Near Threatened	N/A	844472	13.531	97.387	83.855	14.527	89.96	75.433				

				LONG TERM							
				4.5 Wm ⁻²				8.5 Wm ⁻²			
	Amphibians	#Unique Data	IUCN		% Loss	% Gains	Net Change	% Loss	% Gains	Net Change	
1	<i>Anaxyrus californicus</i>	27	Endangered	A	23.59	67.292	43.702	33.019	79.709	46.69	
2	<i>Anaxyrus cognatus</i>	323	Least Concern	N/A	25.67	8.129	-17.541	43.36	4.805	-38.555	
3	<i>Anaxyrus punctatus</i>	637	Least Concern	N/A	0.739	130.259	129.520	0.551	170.024	169.472	
4	<i>Anaxyrus woodhousii</i>	10	Least Concern	N/A	6.085	198.170	192.084	8.293	240.592	232.299	
5	<i>Aneides lugubris</i>	7	Least Concern	Pr	38.17	8.277	-29.893	68.45	0.956	-67.495	
6	<i>Batrachoseps major</i>	52	Least Concern	N/A	24.798	23.305	-1.493	43.544	25.975	-17.57	
7	<i>Incilius alvarius</i>	134	Least Concern	N/A	38.937	90.591	51.655	49.24	108.839	59.599	
8	<i>Lithobates berlandieri</i>	982	Least Concern	Pr	4.549	208.205	203.656	1.792	496.838	495.045	
9	<i>Lithobates catesbeianus</i>	128	Least Concern	N/A	15.15	85.358	70.208	15.765	152.782	137.017	
10	<i>Lithobates forreri</i>	224	Least Concern	Pr	23.402	138.82	115.418	19.531	189.904	170.374	
11	<i>Lithobates yavapaiensis</i>	12	Least Concern	Pr	11.121	109.023	97.902	8.529	166.597	158.069	
12	<i>Pseudacris cadaverina</i>	22	Least Concern	N/A	0.013	99.219	99.206	0.001	159.511	159.51	
13	<i>Pseudacris regilla</i>	95	Least Concern	N/A	21.607	152.22	130.613	30.177	274.83	244.654	
14	<i>Spea hammondi</i>	311	Near Threatened	N/A	17.343	110.793	93.451	26.661	180.666	154.005	

Appendix III

Species' richness maps. (a) Mammals, (b) reptiles, (c) amphibians. Richness maps are shown under present climatic conditions and under two time series (2015-2039 and 2075-2099). Under future climatic conditions species were projected under two different RCPs (Wm^{-2}) (representative concentration pathways).





