Supplementary Table S1. Amphibians and reptiles of Balsas Basin (BB) biogeographic province of Mexico with distributional and conservation status. IUCN Status: (DD = Data Deficient; LC = Least Concern; NT = Near Threatened; VU = Vulnerable; EN = Endangered; CR = Critically Endangered; NE = not Evaluated). Population Trend: Stable (=); Decreasing (↓); Increasing (↑); Unknown (?) according to the IUCN Red List **[24]**; Environmental Vulnerability Score: (EVS – the higher the score the greater the vulnerability: low (L) vulnerability species (EVS of 3–9); medium (M) vulnerability species (EVS of 10–13); and high (H) vulnerability species (EVS of 14–20) **[36,37]**; Mx indicates category of risk in Mexico according to **[35]**: (P = in danger of extinction, A = threatened, Pr = subject to special protection, NL – not listed). G refers to Global Distribution: 0 = Endemic to the BB; 1 = Endemic to Mexico; 2 = Shared between the US and Mexico; 3 = widely distributed from Mexico to Central or South America; 4 = widely distributed from the US to Central or South America; In = Introduced to the BB. T: total number of Mexican biogeographic provinces in which the species has been recorded; En = endemic to the BB.

Class Amphibia	**IUCN**	**EVS**	**Mx**	**G**	**T**
Order Anura					
Bufonidae					
Anaxyrus compactilis (Wiegmann, 1833)	LC (?)	H (14)	NL	1	6
Incilius marmoreus (Wiegmann, 1833)	LC (=)	M (11)	NL	1	8
Incilius occidentalis (Camerano, 1879)	LC (=)	M (11)	NL	1	7
Incilius perplexus (Taylor, 1943)	LC (=)	M (11)	NL	1	2
Incilius pisinnus (Mendelson, Williams, Shell, & Mulcahy, 2005)	EN (↓)	H (15)	NL	1	2
Incilius valliceps (Wiegmann, 1833)	LC (=)	L (6)	NL	3	9
Rhinella horribilis (Wiegmann, 1833)	LC (↑)	L (3)	NL	4	12
Craugastoridae					
Craugastor augusti (Dugès, 1879)	LC (=)	L (8)	NL	2	9
Craugastor hobartsmithi (Taylor, 1937)	LC (=)	H (15)	NL	1	5
Craugastor mexicanus (Brocchi, 1877)	LC (=)	H (16)	NL	1	5
Craugastor occidentalis (Taylor, 1941)	LC (=)	M (13)	NL	1	6
Craugastor pygmaeus (Taylor, 1937)	LC (?)	L (9)	NL	3	7
Craugastor rugulosus (Cope, 1870)	LC (?)	M (13)	NL	1	4
Craugastor vocalis (Taylor, 1940)	LC (↓)	M (13)	NL	1	5
Eleutherodactylidae					
Eleutherodactylus maurus Hedges, 1989	VU (?)	H (17)	Pr	1	2
Eleutherodactylus nitidus (Peters, 1870)	LC (=)	M (12)	NL	1	5
Eleutherodactylus petersi (Duellman, 1954)	NE	NE	NL	1	2
Eleutherodactylus pipilans (Taylor, 1940)	LC (=)	M (11)	NL	3	4
Hylidae					
Dryophytes arenicolor (Cope, 1886)	LC (=)	L (7)	NL	2	8
Dryophytes eximius (Baird, 1854)	LC (=)	M (10)	NL	1	7
Exerodonta xera (Mendelson & Campbell, 1994)	VU (?)	H (14)	NL	1	2
Exerodonta smaragdina (Taylor, 1940)	LC (↓)	M (12)	Pr	1	6
Exerodonta sumichrasti Brocchi, 1879	LC (↓)	L (9)	NL	1	4
Rheohyla miotympanum (Cope, 1863)	LC (=)	L (9)	NL	1	7
Sarcohyla bistincta (Cope, 1877)	LC (↓)	L (9)	Pr	1	5

Sarcohyla crassa (Brocchi, 1877)	CR (↓)	H (14)	Pr	1	2
Sarcohyla hapsa Campbell, Brodie, Caviedes-Solis, Nieto Montes de Oca, Luja, Flores-Villela, García-Vázquez, Sarker & Wostl, 2018	LC (?)	NE	NL	1	5
Sarcohyla pentheter (Adler, 1965)	VU (=)	M (13)	NL	1	2
Scinax staufferi (Cope, 1865)	LC (=)	L (4)	NL	3	9
Smilisca baudinii (Duméril & Bibron, 1841)	LC (=)	L (3)	NL	4	11
Smilisca fodiens (Boulenger, 1882)	LC (=)	L (8)	NL	2	7
Tlalocohyla smithii (Boulenger, 1902)	LC (=)	M (11)	NL	1	6
Triprion spatulatus Günther, 1882	LC (=)	M (13)	NL	1	5
Leptodactylidae					
Leptodactylus fragilis (Brocchi, 1877)	LC (=)	L (5)	NL	4	10
Leptodactylus melanonotus (Hallowell, 1861)	LC (=)	L (6)	NL	3	11
Microhylidae					
Hypopachus ustus (Cope, 1866)	LC (=)	L (7)	Pr	3	8
Hypopachus variolosus (Cope, 1866)	LC (=)	L (4)	NL	4	11
Phyllomedusidae					
Agalychnis dacnicolor (Cope, 1864)	LC (↓)	M (11)	NL	1	5
Ranidae					
Rana berlandieri Baird, 1854	LC (=)	L (7)	Pr	2	9
Rana forreri Boulenger, 1883	LC (=)	L (3)	Pr	3	8
Rana magnaocularis Frost & Bagnara, 1976	LC (?)	M (12)	NL	1	6
Rana megapoda Taylor, 1942	NT (↓)	H (14)	Pr	1	5
Rana montezumae Baird, 1854	LC (↓)	M (13)	Pr	1	6
Rana neovolcanica Hillis & Frost, 1985	LC (=)	M (13)	A	1	6
Rana pustulosa Boulenger, 1883	LC (=)	L (9)	Pr	1	5
Rana spectabilis Hillis & Frost, 1985	LC (↓)	M (12)	NL	1	5
Rana zweifeli Hillis, Frost, & Webb, 1984	LC (=)	M (11)	NL	1	3
Rhinophrynidae					
Rhinophrynus dorsalis Duméril & Bibron, 1841	LC (=)	L (8)	Pr	3	8
Scaphiopodidae					
Spea multiplicata (Cope, 1863)	LC (=)	L (6)	NL	2	9
Order Caudata					
Ambystomatidae					
Ambystoma velasci (Dugès, 1888)	LC (?)	M (10)	Pr	1	6
Plethodontidae					
Isthmura boneti (Álvarez & Martín, 1967)	EN (↓)	H (17)	NL	1	2
Class Reptilia					
Order Crocodylia					
Crocodylidae					
Crocodylus acutus (Cuvier, 1807)	VU (↑)	H (14)	Pr	4	8
Crocodylus moreletii Duméril & Bibron, 1851	LC (=)	M (13)	Pr	3	7
Order Squamata					
Suborder Lacertilia					
Anguidae					

Barisia imbricata (Wiegmann, 1828)	LC (?)	H (14)	Pr	1	5
Gerrhonotus liocephalus Wiegmann, 1828	LC (=)	L (6)	Pr	4	9
Anolidae					
Anolis carlliebi Köhler, Trejo-Pérez, Petersen, & Méndez de la Cruz, 2014	NE	H (15)	NL	1	4
Anolis dunni Smith, 1936	LC (?)	H (16)	A	1	3
Anolis microlepidotus Davis, 1954	LC (=)	H (15)	Pr	1	2
Anolis nebulosus (Wiegmann, 1834)	LC (=)	M (13)	NL	1	6
Anolis quercorum Fitch, 1978	LC (=)	H (16)	NL	1	2
Bipedidae					
Bipes canaliculatus Latreille, 1801	LC (=)	H (17)	Pr	1	2
Corytophanidae					
Basiliscus vittatus Wiegmann, 1828	LC (=)	L (7)	NL	3	8
Eublepharidae					
Coleonyx elegans Gray, 1845	LC (=)	L (9)	A	3	8
Coleonyx nemoralis Klauber, 1945	NE	NE	NL	1	3
Gekkonidae					
Hemidactylus frenatus Schlegel, 1836					In
Helodermatidae					
Heloderma horridum (Wiegmann, 1829)	LC (↓)	M (11)	A	3	6
Iguanidae					
Ctenosaura acanthura (Shaw, 1802)	LC (↓)	M (12)	Pr	3	7
Ctenosaura clarkii Bailey, 1928	VU (?)	H (15)	A	1	2
Ctenosaura pectinata (Wiegmann, 1834)	LC (↓)	H (15)	A	1	7
Iguana iguana (Linnaeus, 1758)	LC (?)	M (12)	Pr	3	9
Phrynosomatidae					
Phrynosoma braconnieri Duméril, & Bocourt, 1870	LC (=)	H (15)	Pr	1	4
Phrynosoma orbiculare (Linnaeus, 1766)	LC (=)	M (12)	A	1	6
Phrynosoma sherbrookei Nieto-Montes de Oca, Arenas-Moreno, Beltrán-Sánchez, & Leaché, 2014	NE	H (15)	NL	1	2
Phrynosoma taurus Bocourt, 1870	LC (=)	M (12)	A	1	2
Phrynosoma asio Cope, 1864	LC (=)	M (11)	Pr	3	5
Sceloporus asper Boulenger, 1897	LC (↓)	H (14)	Pr	1	4
Sceloporus aureolus Smith, 1942	NE	H (15)	NL	1	4
Sceloporus cupreus Bocourt, 1873	NE	H (16)	NL	1	2
Sceloporus formosus Wiegmann, 1834	LC (=)	H (15)	NL	1	4
Sceloporus gadoviae Boulenger, 1905	LC (=)	M (11)	NL	1	2
Sceloporus grammicus Wiegmann, 1828	LC (=)	L (9)	Pr	2	8
Sceloporus halli Dasmann & Smith, 1974	DD (?)	H (17)	NL	1	2
Sceloporus heterolepis Boulenger, 1895	LC (?)	H (14)	NL	1	5
Sceloporus jalapae Günther, 1890	LC (=)	M (13)	NL	1	4
Sceloporus megalepidurus Smith, 1934	VU (↓)	H (14)	Pr	1	5
Sceloporus melanorhinus Bocourt, 1876	LC (=)	L (9)	NL	3	6
Sceloporus ochoterenae Smith, 1934	LC (=)	M (12)	NL	1	3

Sceloporus siniferus Cope, 1870	LC (=)	M (11)	NL	3	4
Sceloporus spinosus Weigmann, 1828	LC (=)	M (12)	NL	1	7
Sceloporus subpictus Lynch & Smith, 1965	DD (?)	H (16)	A	1	2
Sceloporus horridus Wiegmann, 1834	LC (=)	M (11)	NL	1	6
Sceloporus pyrocephalus Cope, 1864	LC (=)	M (12)	NL	1	4
Sceloporus utiformis Cope, 1864	LC (=)	H (15)	NL	1	6
Urosaurus bicarinatus (Duméril, 1856)	LC (=)	M (12)	NL	1	7
Urosaurus gadovi Schmidt, 1921	LC (?)	M (12)	NL	1	3
Phyllodactylidae					
Phyllodactylus bordai Taylor, 1942	LC (=)	M (13)	Pr	1	3
Phyllodactylus duellmani Dixon, 1960	LC (?)	H (16)	Pr	1	2
Phyllodactylus kropotkini Ramírez-Reyes & Flores-Villela, 2017	NE	NE	NL	0	En
Phyllodactylus papenfussi Murphy, Blair, & Méndez de la Cruz, 2009	NE	H (16)	NL	0	En
Phyllodactylus paucituberculatus Dixon, 1960	DD (?)	H (16)	A	0	En
Phyllodactylus lanei Smith, 1935	LC (=)	H (15)	NL	1	5
Scincidae					
Marisora aquilonaria McCraine, Matthews, & Hedges, 2020	NE	NE	NL	1	7
Marisora lineola McCranie, Matthews, & Hedges, 2020	NE	NE	NL	3	6
Mesoscincus altamirani (Dugès, 1891)	DD (?)	H (14)	Pr	1	2
Plestiodon lotus Pavón-Vázquez, Nieto Montes de Oca, Mendoza-Hernández, Centenero-Alcalá, Santa Cruz-Padilla, & Jiménez-Arcos, 2017	NE	H (16)	NL	0	En
Scincella assata (Cope, 1864)	LC (=)	L (7)	NL	3	6
Scincella gemmingeri (Cope, 1864)	LC (=)	M (11)	Pr	1	7
Scincella silvicola (Taylor, 1937)	LC (=)	M (12)	A	1	5
Teiidae					
Aspidoscelis calidipes (Duellman, 1955)	LC (?)	H (14)	Pr	1	2
Aspidoscelis communis (Cope, 1878)	LC (=)	H (14)	Pr	1	4
Aspidoscelis costatus (Cope, 1878)	LC (=)	M (11)	Pr	1	8
Aspidoscelis deppii (Wiegmann, 1834)	LC (=)	L (8)	NL	3	7
Aspidoscelis guttatus (Wiegmann, 1834)	LC (=)	M (12)	NL	1	7
Aspidoscelis lineattissimus (Cope, 1878)	LC (=)	H (14)	Pr	1	5
Aspidoscelis mexicanus (Peters, 1869)	LC (=)	H (14)	Pr	1	2
Aspidoscelis motaguae (Sackett, 1941)	LC (=)	M (12)	NL	3	3
Aspidoscelis parvisocius (Zweifel, 1960)	LC (=)	H (15)	Pr	1	2
Aspidoscelis sackii (Wiegmann, 1834)	LC (=)	H (14)	NL	1	2
Holcosus sinister (Wiegmann, 1834)	NE	M (13)	NL	1	4
Xantusidae					
Lepidophyma radula (Smith, 1942)	DD (?)	M (13)	A	1	2
Lepidophyma tarascae Bezy, Webb, & Álvarez, 1982	DD (?)	H (14)	A	1	3
Xenosauridae					

Xenosaurus rectocollaris Smith & Iverson, 1993	LC (=)	H (16)	NL	1	3
Order Squamata					
Suborder Serpentes					
Boidae					
Boa imperator Daudin, 1803	LC (=)	M (10)	NL	3	9
Boa sigma (Smith, 1943)	NE	M (10)	NL	1	6
Colubridae					
Conopsis acuta (Cope, 1886)	NE	H (14)	NL	1	5
Conopsis lineata (Kennicott, 1859)	LC (=)	M (13)	NL	1	5
Conopsis megalodon (Taylor & Smith, 1942)	LC (=)	H (14)	NL	1	2
Conopsis nasus (Günther, 1858)	LC (=)	M (11)	NL	1	5
Drymarchon melanurus (Duméril, Bibron, & Duméril, 1854)	LC (=)	L (6)	NL	4	12
Drymobius margaritiferus (Schlegel, 1837)	LC (=)	L (6)	NL	4	10
Ficimia publia (Cope, 1866)	LC (=)	L (9)	NL	3	7
Lampropeltis abnorma (Bocourt, 1886)	LC (=)	L (9)	NL	3	7
Lampropeltis mexicana (Garman, 1884)	LC (=)	H (15)	A	1	5
Lampropeltis polyzona Cope, 1860	LC (?)	M (11)	NL	1	9
Leptophis diplotropis (Günther, 1872)	LC (=)	H (14)	A	1	8
Masticophis flagellum Shaw, 1802	LC (=)	L (8)	A	2	9
Masticophis mentovarius (Duméril, Bibron, & Duméril, 1854)	LC (?)	L (6)	A	3	11
Mastigodryas cliftoni (Hardy, 1964)	DD (?)	H (14)	NL	1	4
Mastigodryas melanolomus (Cope, 1868)	LC (=)	L (6)	NL	3	8
Oxybelis microphthalmus Barbour & Amaral, 1926	NE	NE	NL	2	9
Pituophis deppei (Duméril, 1853)	LC (=)	H (14)	A	1	7
Pituophis lineaticollis (Cope, 1861)	LC (=)	L (8)	NL	3	5
Pseudoficimia frontalis (Cope, 1864)	LC (=)	M (13)	NL	1	7
Salvadora bairdii Jan & Sordelli, 1860	LC (=)	H (15)	Pr	1	8
Salvadora intermedia Hartweg, 1940	LC (=)	H (16)	Pr	1	2
Salvadora lemniscata (Cope, 1895)	LC (=)	H (15)	Pr	1	4
Salvadora mexicana (Duméril, Bibron, & Duméril, 1854)	LC (=)	H (15)	Pr	1	5
Senticolis triaspis (Cope, 1866)	LC (=)	L (6)	NL	4	11
Sonora michoacanensi (Dugès, 1884)	LC (=)	H (14)	NL	1	4
Stenorrhina freminvillei (Duméril, Bribon, & Duméril, 1854)	LC (=)	L (7)	NL	3	7
Tantilla bocourti (Günther, 1895)	LC (?)	L (9)	NL	1	8
Tantilla deppei (Bocourt, 1883)	LC (?)	M (13)	A	1	3
Tantilla flavilineata Smith & Burger, 1950	EN (=)	H (14)	A	1	2
Tantilla rubra Cope, 1875	LC (?)	L (5)	Pr	3	8
Tantilla calamarina Cope, 1866	LC (=)	M (12)	Pr	1	4
Trimorphodon paucimaculatus Taylor, 1936	NE	H (15)	NL	1	5
Trimorphodon tau Cope, 1870	LC (=)	M (13)	NL	1	8

Trimorphodon biscutatus (Duméril, Bibron, & Duméril, 1854)	LC (=)	L (7)	NL	3	6
Dipsadidae					
*Coniophanes fissidens (*Günther, 1858)	LC (=)	L (7)	NL	3	7
Coniophanes melanocephalus (Peter, 1869)	DD (?)	H (14)	NL	0	En
Coniophanes lateritius Cope, 1862	DD (?)	M (13)	NL	1	5
Conophis vittatus Peters, 1860	LC (=)	M (11)	NL	3	6
Enulius flavitorques (Cope, 1868)	LC (=)	L (5)	NL	3	5
Geophis annuliferus (Boulenger, 1894)	LC (=)	M (13)	Pr	1	5
Geophis petersii Boulenger, 1894	DD (?)	H (15)	Pr	1	3
Geophis sieboldi (Jan, 1862)	DD (?)	M (13)	Pr	1	3
Hypsiglena torquata (Günther, 1860)	LC (=)	L (8)	Pr	1	5
Imantodes gemmistratus (Cope, 1861)	LC (=)	L (6)	Pr	3	8
Leptodeira septentrionalis (Kennicott, 1859)	LC (=)	L (8)	NL	4	10
Leptodeira splendida Günther, 1895	LC (?)	H (14)	NL	1	6
Leptodeira maculata (Hallowell, 1861)	LC (=)	L (7)	Pr	1	9
Manolepis putnami (Jan, 1863)	LC (=)	M (13)	NL	1	6
Pseudoleptodeira latifasciata (Günther, 1894)	LC (=)	H (14)	Pr	1	3
Rhadinaea fulvivittis Cope, 1875	VU (↓)	M (11)	NL	1	4
Rhadinaea hesperia Bailey, 1940	LC (=)	M (10)	Pr	1	7
Rhadinaea taeniata (Peters, 1863)	DD (?)	M (13)	NL	1	6
Tropidodipsas zweifeli (Liner & Wilson, 1970)	DD (?)	H (16)	Pr	1	2
Elapidae					
Micrurus distans (Kennicott, 1860)	LC (=)	H (14)	Pr	1	7
Micrurus ephippifer (Cope, 1886)	VU (↓)	H (15)	Pr	1	4
Micrurus laticollaris Peters, 1870	LC (=)	H (14)	Pr	1	4
Micrurus pachecogili Campbell, 2000	DD (?)	H (18)	NL	0	En
Leptotyphlopidae					
Epictia bakewelli (Oliver, 1937)	NE	M (11)	NL	1	4
Epictia phenops (Cope, 1875)	NE	L (4)	NL	3	7
Epictia schneideri Wallach, 2016	NE	NE	NL	1	2
Rena bressoni (Taylor, 1939)	DD (?)	H (14)	Pr	1	2
Rena humilis Baird & Girard, 1853	LC (=)	L (8)	NL	2	9
Rena maxima (Loveridge, 1932)	LC (=)	M (11)	NL	1	4
Loxocemidae					
Loxocemus bicolor Cope, 1861	LC (?)	M (10)	Pr	3	6
Natricidae					
Storeria storerioides (Cope, 1865)	LC (=)	M (11)	NL	1	6
Thamnophis chrysocephalus (Cope, 1885)	LC (=)	H (14)	A	1	4
Thamnophis cyrtopsis (Kennicott, 1860)	LC (=)	L (7)	A	4	10
Thamnophis eques (Reuss, 1834)	LC (=)	L (8)	A	2	7
Thamnophis godmani (Günther, 1894)	LC (↓)	H (14)	A	1	4
Thamnophis postremus (Smith, 1942)	LC (?)	H (15)	NL	1	2
Typhlopidae					
Indotyphlops braminus (Daudin, 1803)					In
Viperidae					

Agkistrodon bilineatus (Günther, 1863)	NT (↓)	M (11)	Pr	3	6
Crotalus basiliscus (Cope, 1864)	LC (=)	H (16)	Pr	1	6
Crotalus culminatus Klauber, 1952	NE	H (15)	NL	1	4
Crotalus intermedius Troschel, 1865	LC (=)	H (15)	A	1	5
Crotalus molossus Baird & Girard, 1853	LC (=)	L (8)	Pr	2	8
Crotalus ravus Cope, 1865	LC (=)	H (14)	A	1	5
Crotalus scutulatus (Kennicott, 1861)	LC (=)	M (11)	Pr	2	7
Crotalus tlaloci Bryson, Linkem, Dorcas, Lathrop, Jones, Alvarado-Díaz, Gründwald, & Murphy, 2014	NE	H (16)	NL	1	2
Mixcoatlus melanurus (Müller, 1924)	EN (↓)	H (17)	Pr	1	2
Order Testudines					
Geoemydidae					
Rhinoclemmys rubida (Cope, 1870)	NT (↓)	H (14)	Pr	1	6
Kinosternidae					
Kinosternon hirtipes (Wagler, 1830)	LC (↓)	M (10)	Pr	2	6
Kinosternon integrum LeConte, 1854	LC (=)	M (11)	Pr	1	9
Kinosternon scorpioides (Linnaeus, 1766)	NE	M (10)	Pr	3	9
Trionychidae					
Apalone spinifera (Le Sueur, 1827)					In