### Table S2: Traits rendering amphibian species as of ‘high’ and ‘low/lower’ climate change vulnerability, and the number of species qualifying under these categories and as unknown according to each trait.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Trait Group** | **Trait** | **Not of high vulnerability** | **High vulnerability** | Unknown  |
| Threshold | No. species | Threshold | No. species | No. species |
| **Sensitivity** |
| **a. Specialised habitat and/or microhabitat requirements** | Habitat specialist | Occurs in 2-33 habitats | 4,539 | Occurs in 1 habitat | 1,509 | 156 |
| Dependence on a particular microhabitat | All other species | 5,085 | Larval development and freshwater dependent and occurs exclusively in an unbuffered habitat (i.e. not forest) | 955 | 164 |
| **b. Narrow environmental tolerances or thresholds that are likely to be exceeded due to climate change at any stage in the life cycle** | Narrow temperature tolerance (adults) | Highest 75%: **Average absolute deviation** in temperature across the species' historical range > 1.20 oC | 4,556 | Lowest 25%: **Average absolute deviation** in temperature across the species' historical range ≤1.20 oC | 1,520 | 128 |
| Narrow precipitation tolerance (adults) | Highest 75%: **Average absolute deviation** in precipitation across the species' historical range > 45.84mm | 4,557 | Lowest 25%: **Average absolute deviation** in precipitation across the species' historical range ≤ 45.84 mm | 1,519 | 128 |
| **c. Dependence on a specific environmental trigger that’s likely to be disrupted by climate change** | Dependence on a specific environmental trigger that’s likely to be disrupted by climate change | All other species | 4,113 | Explosive breeder on rainfall or increased water availability cue (not in forest) | 316 | 1,775 |
| **d. Dependence on interspecific interactions which are likely to be disrupted by climate change** | Increasing negative interactions with other species | All other species | 4,897 | (Chytridiomycosis related decline recorded) or (vulnerable to enigmatic decline) or (likely future infection (in a genus with a recorded infection and is freshwater dependent and in subtropical or tropical (forest, shrubland or grassland habitats)) | 1,307 | 0 |
|  |  | **1,365** |  | **4,453** |  | **386** |
|  |  | **22.00%** |  | **71.80%** |  | **6.20%** |
| **Exposure** |
| **Sea level rise** | Habitat types exposed to sea level inundation | All other species |   | Occurs largely in inundation exposed coastal habitats and in no or only one other habitat type | 4 | 156 |
| **Changes in temperature**  | Substantial changes in **mean temperature** occur across the species' range | Lowest 75%:Absolute difference between (**mean temperatures** across the species' range for all months) from 1975-2050 < 2.96 oC |   | Highest 25%:Absolute difference between (**mean temperatures** across the species' range for all months) from 1975-2050 ≥ 2.96 oC | 1,515 | 145 |
| Substantial changes in **temperature variability** across the species' range | Lowest 75%:Absolute difference between (**average absolute deviation in temperature** across the species' range for all months) from 1975 to 2050 < 1.93 oC |   | Highest 25%:Absolute difference between (**average absolute deviation in temperature** across the species' range for all months) from 1975 to 2050 ≥ 1.93 oC | 1,515 | 145 |
| **Changes in precipitation**  | Substantial changes in **mean precipitation** occur across the species' range | Lowest 75%: Absolute ratio of change in (**mean precipitation** across the species' range for all months) from 1975 to 2050 < 0.59 |   | Highest 25%: Absolute ratio of change in (**mean precipitation** across the species' range for all months) from 1975 to 2050 ≥ 0.59 | 1,515 | 145 |
| Substantial changes in **precipitation variability** across the species' range | Lowest 75%: Absolute ratio of change in (**average absolute deviation in precipitation** across the species' range for all months) from 1975 to 2050 < 0.65 |   | Highest 25%: Absolute ratio of change in (**average absolute deviation in precipitation** across the species' range for all months) from 1975 to 2050 ≥ 0.65 | 1,515 | 145 |
|  |  | **2,642** |  | **3,356** |  | **206** |
|  |  | **42.60%** |  | **54%** |  | **3.30%** |
| **Low adaptive capacity** |
| **f. Poor dispersability** | Low intrinsic dispersal capacity | All other species | 4,522 | Has not become established outside its natural range, and not associated with flowing water, and range size ≤ 4,000 km2  | 1,569 | 113 |
| Extrinsic barriers to dispersal | All other species | 3,900 | Occurs exclusively on mountaintops, small islands, polar edges of land masses and/or polar edges of suitable natural habitat | 745 | 1,559 |
| **g. Poor Evolvability** | Low reproductive capacity | All other species | 899 | Annual reproductive output ≤ 50 or viviparous | 2,073 | 3,232 |
|  |  | **2,898** |  | **3,233** |  | **73** |
|  |  | **46.70%** |  | **52.10%** |  | **1.20%** |