

Agenda Item 14b – Motion on Notice received from Councillor Eburne - Appendix

Scientists have long warned that hundreds of species are being driven to extinction every year. It is now understood that the annihilation of species is happening at a rate that means a “sixth mass extinction event”, unparalleled for 65 million years, is well under way. Prof Gerardo Ceballos and colleagues, writing in the *Proceedings of the National Academy of Sciences*, demonstrate that species losses over the past century are 100 times higher than pre-human background rates¹. In this research, 40% of extant species studied have undergone severe population declines and lost more than 80% of their geographical ranges.

A new report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) also states that over 1 million species will be lost within decades². The report points to the impacts of severe human alteration to 75% of terrestrial and 66% marine environments. More than 85% of wetlands have been lost and over 40% of amphibious species are threatened with extinction. These impacts will be severely compounded by climate change, with 5% of the estimated fraction of species at risk of extinction from 2°C warming alone, rising to 16% at 4.3°C warming². The distributions of almost half of land-based mammals have already been negatively affected by climate change. Averting a dramatic decay of biodiversity and the subsequent loss of ecosystem services is still possible through intensified conservation efforts, but that window of opportunity is rapidly closing¹.

¹Ceballos G, Ehrlich PR, Rodolfo Dirzo R (2017) Population losses and the sixth mass extinction. *Proceedings of the National Academy of Sciences*, 114 (30) E6089-E6096

²IPBES. 2019. Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science- Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES Secretariat, Bonn, Germany