STATEMENT OF NEIL ALDRIN MALLARI, PhD Ecology President and Chief Scientist, Center for Conservation Innovations, Inc.

We were invited by Desiree Llanos Dee and Hasminah Paudac, both petitioners in the human rights and climate change case to act as resource person for the petitioners to explain impacts of climate change on the terrestrial biodiversity in the public hearing of the novel human rights and climate change inquiry **in the Philippines** (Commission on Human Rights Session Hall, Quezon City) **on 29-30 August 2018**.

The gist of the oral statement to be delivered are as follows:

The Philippines comprises more than 7100 islands covering c.300 000 km2. The country is of crucial importance to global biodiversity because of its exceptional levels of narrow endemism, both terrestrial and marine. However, it also suffers from problems relating to an impoverished, large and rapidly increasing human population (c.100 million in mid- 2014 or 334 people/km2), a gross loss of forest cover especially at lower elevations, and many unsustainable land-use practices. These factors have resulted in the Philippines supporting by far the largest number (36) of 'Critically Endangered' and 'Endangered' (sensu IUCN) endemic bird species of any country in the world proportionate to its size. The severe deforestation that has happened in the country must be abated if not reversed.

The Philippines is one of the most climate change vulnerable areas in Southeast Asia (Yusuf and Francisco, 2009). While preparedness through disaster management and adaptation strategies is a priority, mitigation remains to be crucial. The country's vulnerability is exacerbated by the continued attrition of our forests. The unique biodiversity that we have are therefore becoming particularly vulnerable to the deleterious effects of climate change. The link between climate change and biodiversity has long been established. Evidence across the globe tell us that rapid climate change affects ecosystems and species ability to adapt and so biodiversity loss increases. According to the Millennium Ecosystem Assessment, climate change is likely to become one of the most significant drivers of biodiversity loss by the end of the century. Climate change is already forcing biodiversity to adapt either through shifting habitat, changing life cycles, or the development of new physical traits.

This presentation provides evidence of the impacts of the combined assault of habitat loss/degradation and climate change to Philippine wildlife. I present four case studies that illustrates the effects of rapidly changing weather patterns to breeding cycles of globally threatened species in Palawan; the elevational shifts of threatened species to find suitable habitats which have now been decimated in Mindoro and Negros; and the impacts of calamities brought about by extreme weather conditions in Metro Manila.

Nothing further.

Neil Aldrin Mallari, Ph.D Date of signing: 13 August 2018