112 Scaling collaborative action for threatened freshwater fishes through ex situ conservation

RECOGNISING that freshwaters cover less than 1% of the Earth's surface area but support approximately 10% of all species and half of all species of fishes;

ACKNOWLEDGING that the freshwater realm has been significantly overlooked by global conservation efforts and environmental governance, despite evidence of distinct management needs when compared to marine and terrestrial realms;

ALARMED that, from 1970 to 2015, 35% of global wetlands were lost due to anthropogenic threats, and, from 1970 to 2020, the Living Planet Index (LPI) shows an 85% decline in monitored populations of freshwater vertebrates;

ALARMED FURTHER that, as of October 2024, 78 species of freshwater fishes have become extinct and 26% of freshwater fishes are at risk of extinction, according to The IUCN Red List of Threatened Species™;

ACKNOWLEDGING FURTHER that the IUCN Red List currently includes 11 species that survive only in conservation breeding programmes, and 385 species of freshwater fishes for which ex situ conservation is a recommended action, with the vast majority of extant species not currently maintained in ex situ populations due to financial constraints, limited technical capacity and insufficient political support;

HIGHLIGHTING the vital role of zoos, aquariums, botanic gardens, museums and universities (hereafter ex situ holders) in global conservation through expertise in genetics, behavioural and veterinary science, cryopreservation, husbandry, wildlife reintroduction and translocation, research and public engagement, as well as the essential contributions of public agencies;

AWARE OF the significant value of well designed ex situ conservation actions in preventing species extinction and their role in successful species recovery; and

MINDFUL of the need for evidence-based standardised guidelines, data-sharing platforms and global partnerships of key actors to scale impacts of ex situ conservation efforts for threatened freshwater fishes;

The IUCN World Conservation Congress 2025, at its session in Abu Dhabi, United Arab Emirates:

1. RECOMMENDS that ex situ freshwater fish conservation efforts by IUCN Commissions and Members be prioritised through tested IUCN methodologies that incorporate the *Guidelines on the Use of* Ex situ *Management for Species Conservation* and the IUCN Species Survival Commission's (SSC) One Plan Approach;

2. REQUESTS that SSC and IUCN Members apply these methods to define an evidence-based globally accepted priority list of freshwater fishes for ex situ conservation with species-specific conservation end goals;

3. RECOMMENDS the development and adoption of standardised management guidelines and science-based tools for ex situ freshwater fish populations that:

a. align with and support goals 1 to 9 of the publication *IUCN Technical Guidelines on the Management of Ex-Situ Populations for Conservation*;

b. adopt and apply the SSC's Integrated Collection Assessment and Planning (ICAP) multi-species planning approach;

c. consider taxa-specific management strategies based on available life-history data;

d. facilitate adoption of standardised methodologies across ex situ holders and hobbyist communities; and

e. consider potential conservation conflicts with other taxa, and adopt case-sensitive approaches to ensure ecosystem-wide benefits;

4. URGES SSC to engage ex situ holders in conceptualising and implementing a standardised communication and data-sharing platform to leverage the ex situ potential of hobbyist communities; and

5. CALLS ON IUCN Commissions and Members to engage ex situ holders and in situ actors to jointly prioritise, scale and mobilise resources for ex situ conservation of freshwater fishes, and to facilitate successful recovery of wild populations where appropriate.