U.S. Fish and Wildlife Service Division of International Conservation Amphibians In Decline Fund Summary FY 2011

In 2011, the USFWS awarded 13 new grants from the Amphibians In Decline Fund totaling \$343,341.00, which was matched by \$983,311.50 in leveraged funds. Field projects in thirteen countries (in alphabetical order below) will be supported.

Cameroon

AD-0116 Conservation of Cameroon's caecilian amphibians. In partnership with The Natural History Museum. This project will support five species of poorly known caecilians in Cameroon by building national capacity in caecilian natural history and conservation. The grantee will conduct field surveys in forested areas, reassessments of the species' conservation status, and training for Cameroonian personnel in caecilian biology and conservation.

FWS/USAID: \$24,955 Leveraged funds: \$25,432

China

AD-0074 Building a future for the Chinese giant salamander: a consolidated approach to the conservation of Andrias davidianus. In partnership with Zoological Society of London. This project will build a long-term program for conservation of the Chinese giant salamander. The grantee will conduct field surveys and genetic analysis of giant salamander populations in Anhui, Guangxi, Shaanxi, and Qing'hai, including surveillance for emerging infectious diseases. The project will also build capacity for networks of Chinese experts and stakeholders at key institutions, and train Chinese conservationists in field and laboratory protocols.

FWS: \$24,955 Leveraged funds: \$109,272

Costa Rica

AD-0107 *Identifying antifungal cutaneous bacteria for potential biocontrol of the amphibian chytrid fungus in Costa Rica*. In partnership with University of South Dakota. This grant will support the costs of culturing bacteria from amphibian populations that have survived chytridiomycosis epidemics to search for microbes that may increase resistance to the disease. The grantee will grow different types of bacteria found on at least 20 wild frogs from 10 populations in Costa Rica, and conduct trials to identify the bacteria species that inhibits the fungal pathogen responsible for chytridiomycosis.

FWS: \$34,997 Leveraged funds: \$12,947

Ecuador

AD-0103 Emergency action for the conservation of Hyloxalus jacobuspetersi (Amphibia: Dendrobatidae), a species at the verge of extinction. In partnership with Fundacion Ontaga. This project will establish a captive assurance colony for a species of poison arrow dart frog, Hyloxalus jacobuspetersi, in central Ecuador. The grantee will conduct field surveys and behavioral studies of wild individuals in the Valle de los Chillos, including disease surveillance

to determine frequency of infection and chytrid's impact on the survival of target species. The grantee will also protect and restore habitat for the species, including re-routing of a visitor path.

FWS: \$24,999 Leveraged funds: \$4,550

Equatorial Guinea

AD-0113 Conservation of Bioko Island's endangered amphibians, Arlequins krebis and Didynamipus sjostedti. In partnership with Drexel University. This project will prevent immediate destruction of critical habitat for two endangered frogs on Bioko Island, Equatorial Guinea. The grantee will conduct a habitat assessment and coordinate with a road construction company, Razel Inc., to mitigate the effects of a new road. The grantee will also promote amphibian conservation to local authorities.

FWS/USAID: \$10,609 Leveraged funds: \$11,681

Ethiopia

AD-0088 Conserving threatened amphibians of the Ethiopian highlands. In partnership with University of Basel. This project will develop management plans for at least four target amphibian species in the Ethiopian highlands, including revision of the species' IUCN Red List assessments and public outreach. The grantee will conduct disease surveillance and field surveys of species distribution and habitat, including less developed forest sites in Bale Mountain National Park and the Simien Mountains, and training for government wildlife authorities in amphibian conservation and field data collection.

FWS/USAID: \$30,650 Leveraged funds: \$26,635

India

AD-0090 Evaluation and impact of chytridiomycosis on the endemic, highly threatened amphibians of the Western Ghats. In partnership with Wildlife Information Liaison Development Society-Zoo Outreach Organization. This project will sample for the presence of the fungal pathogen, Batrachochytrium dendrobatidis (Bd) in the threatened amphibians of the Western Ghats, India. The grantee will conduct a field survey of the status of Bd in at least 10 locations, develop a policy document that addresses exotic species in the aquarium trade, and coordinate public outreach to promote amphibian conservation.

FWS: \$24,640 Leveraged funds: \$43,010

Kenya

AD-0070 *Habitat restoration for the critically endangered Sagalla caecilian* Boulengerula niedeni Muller, Measey, Loader & Malonza, 2005 *in Sagalla Hill, Kenya*. In partnership with National Museums of Kenya. This project will address the direct threats affecting the Sagalla caecilian including soil erosion, water draining, and siphoning effects of exotic plant species. The grant will support hiring and supervising of community participants to identify and plant the most viable native tree species for each location. The grantee will develop educational materials on procedures for tendering and maintenance of native plant species.

FWS: \$22,917 Leveraged funds: \$11,995

Madagascar

AD-0076 Supporting communities to conserve the critically endangered golden mantella frog in Madagascar. In partnership with Madagasikara Voakajy. This project will engage the government of Madagascar to support community-based organizations to conserve the golden mantella frog. The project will restore and protect breeding ponds damaged by gold mining, train at least 5 community members to collect field data, and establish a community-based conservation organization in Lakato Village. Community outreach will promote amphibian conservation and establish a traditional law to protect the breeding ponds.

FWS/USAID: \$24,925 Leveraged funds: \$49,653

Panama

AD-0072 Probiotic method to reduce the threat of chytridiomycosis to Panamanian Golden Frogs II. In partnership with Smithsonian Institution. This project will test the ability of antifungal bacteria to persist on Panamanian golden frog skin and confer resistance to the fungal pathogen, Batrachochytrium dendrobatidis (Bd), which is affecting golden frog populations. Skin swabs of Panamanian frogs will determine if these beneficial bacteria can colonize and persist on the skin of the species, and laboratory trials will treat the frogs to determine if antifungal bacteria improves survival of frogs exposed to Bd.

FWS: \$29,000 Leveraged funds: \$529,027

Peru

AD-0089 *Conserving Peru's Lake Titacaca frog.* In partnership with Denver Zoological Foundation. This project will reduce harvest of the Lake Titicaca frog in Peru and increase awareness of the conservation status of the species. The grantee will conduct field surveys to assess population trends, sampling for genetic analysis and fungal chytrid pathogen, and public outreach to promote amphibian conservation. An amphibian breeding center will be established at the Universidad Nacional del Altiplano (UNA) at Puno.

FWS: \$23,390 Leveraged funds: \$102,330

Philippines

AD-0084 Can we prevent a chytridiomycosis epidemic in the Philippines? In partnership with San Francisco State University. This project will comprehensively survey for Batrachochytrium dendrobatidis (Bd) in the Phillippines and attempt to lower Bd infection intensity by treating frogs with beneficial bacteria. The grantee will treat free-ranging amphibians with native mutually beneficial bacteria, and monitor the treatment's success against the fungal pathogen responsible for chytridiomycosis.

FWS: \$24,997 Leveraged funds: \$20,023

South Africa

AD-0098 *Rough moss frog habitat protection project.* In partnership with CapeNature. This project will restore at least 1,350 hectares of habitat for the rough moss frog in southern South Africa by controlling an invasive pine tree that increases the risk of catastrophic fire. The grantee will also conduct at least 6 field surveys of rough moss frog abundance.

FWSUSAID: \$42,307 Leveraged funds: \$36,756.5