

# Case Study

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You are completing a postdoctoral fellowship in wildlife, fisheries, and conservation biology (WFCB) at the University of California, Davis. The WFCB department regularly collaborates with the US Fish & Wildlife Service (USFWS). You receive a phone call from Dr. Ludwig Picklemann at USFWS with an urgent message. A “species rescue” is required. Shoshone pupfish (*Cyprinodon nevadensis shoshone*) are in serious trouble. These fish are one of 15 pupfish subspecies that inhabit tiny hot springs near Death Valley, California. Pupfish are renowned in the animal world for living in the most inhospitable places imaginable. Many of these springs are over 130 degrees Fahrenheit, with very high salinity—approaching levels found in the Great Salt Lake. Pupfish are the only vertebrate genus in the world capable of living in such hot water without experiencing the complete denaturing of their DNA. Dr. Picklemann tells you that an entrepreneur from Los Angeles purchased property adjacent to Shoshone Hot Springs where the endangered pupfish are located. Implementing a grand vision for a hotel and hot springs, she has tapped the spring for a brand new swimming pool. The entrepreneur has been flushing chlorinated water from the swimming pool back into the spring, killing pupfish. More than 90% of the endemic Shoshone pupfish, the only examples in the world, are dead. Dr. Picklemann urgently needs you to join him on a trip to Southern California. Using special tanker trucks, the plan is to rescue the remaining pupfish and deliver them to your lab at UC Davis. Once in the lab, rescued pupfish can be propagated for reintroduction into protected habitat. He is leaving Sacramento in 15 minutes to come pick you up. There is no time to file an IACUC protocol.

## *Process Questions for Groups*

1. PHS policy states that IACUCs must know where field studies will be located and what procedures will be involved. If researcher activity alters or influences the activities of the animal(s) under study (i.e., capture and release), then IACUC review and approval are required. Given your rescue mission would seem to require IACUC review, what are your compliance options? How will you manage the situation in the moment? For the long term?