Sierra Nevada and Mountain Yellow-legged Frog (northern DPS) Minimum Qualifications

To reduce risks related to incidental take associated with research, education, and recovery actions of the Sierra Nevada yellow-legged frog (*Rana sierrae*) and northern DPS of the mountian yellow-legged frog (*Rana muscosa*), the Service will review the credentials of all applicants for section 10(a)(1)(A) recovery permits and sub-permits to ensure that only qualified individuals will survey, or conduct/direct research efforts for, the mountain yellow-legged frog. Applicants will be considered qualified for a recovery permit or sub-permit to independently conduct surveys or research for the mountain yellow-legged frog if they meet the Service's most current qualification requirements. Specifically, at a minimum, prospective applicants must:

- 1. Possess a Bachelor's degree in biology or a resource management-related field, or equivalent field/work experience;
- 2. Have completed course work in herpetology, fresh water limnology, and study-design/survey-methodology, or equivalent field experience;
- 3. Have verifiable experience in the design and implementation of herpetological research including a minimum of 5 surveys for a minimum of 40 hours consisting of trapping with a hand net or hand capturing, handling, and identifying the species in the field under the supervision of a 10(a)1(A) permitted mountain yellow-legged frog biologist during which time at least 10 mountain yellow-legged frog adults were positively identified, at least 10 mountain yellow-legged frog tadpoles were identified, and egg masses of the mountain yellow-legged frog were observed.
- 4. Have captured and handled at least 5 individual adult and ten larval foothill yellow-legged frogs (*Rana boylii*) under the supervision of a permitted biologist in order to observe morphological differences in con-generic species;
- 5. Have familiarity with suitable mountain yellow-legged frog habitat within the freshwater lakes of the Sierra Nevada Range;
- 6. Have familiarity with fish and invertebrate species, native and non-native, which may cooccur with the listed species; and,
- 7. Receive a written recommendation from at least one 10(a)1(A) permitted mountain yellow-legged frog biologist stating that the prospective permittee was trained at least in part by them and that the prospective permittee meets the minimum qualification guidelines listed above.
- 8. For individuals conducting research, the completion of a study proposal accepted by an accredited educational institution, a letter of support from a faculty advisor (for students), and a list of experience conducting the research activities or related activities on the listed or similar species will be required. This includes research involving the treatment of frogs with Bd or chytrid fungus.

Permittee or sub-permittees performing collection of biological samples, like blood and other tissue, from mountain yellow-legged frog must have demonstrated prior experience with no less than (12) individuals (including at least 4 mountain yellow-legged frog) prior to being allowed to perform the procedure without direct supervision.

Individuals not qualified to conduct scientific research or other activities covered under a recovery permit or sub-permit will be required to work under the supervision of a qualified, permitted individual until the minimum qualifications are met. The Service will develop or modify, as new information becomes available, existing and additional qualifications that each applicant must meet in order to qualify for a mountain yellow-legged frog recovery permit or sub-permit.